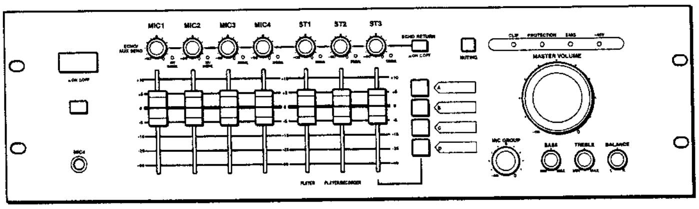
SRP-X351P

SERVICE MANUAL

J Model
AEP Model
E Model


MIC1
MIC2
MIC3
MIC4
ST1
ST2
ST3
ECHO/AUX SEND
ECHO RETURN
ON OFF
MUTING
CLIP
PROTECTION
EMG
MASTER VOLUME
MIC4
A
B
C
D
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+5
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PLAYER
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POWERED MIXER

SONY®

SPECIFICATIONS

AUDIO INPUT/OUTPUT SPECIFICATIONS

Name	Connector Type	Number of channels	Standard input/output level	Max input/output level	Input/output impedance
MIC IN (REAR) (FRONT)	XLR-3-31 PHONE	4	-54dBu	-24dBu	2.2kΩ
ST1 input	Phono Jack	1(Stereo)	-10dBu	+20dBu	20kΩ
ST2 input	Phono Jack	1(Stereo)	-10dBu	+20dBu	20kΩ
ST3 input(A,B,C,D)	Phono Jack	4(Stereo)	-10dBu	+20dBu	20kΩ
Echo return input	Phono Jack	1(Stereo)	-10dBu	+10dBu	20kΩ
Mic group output	Phono Jack	1	-10dBu	+10dBu	470Ω
Echo send	Phono Jack	1	-10dBu	+10dBu	470Ω
Master output	Phono Jack	1(Stereo)	-5dBu	+15dBu	470Ω
Rec output	Phono Jack	1(Stereo)	-10dBu	+10dBu	470Ω
Speakers output	Screw type binding terminal	1(Stereo)	Rated output 125W + 125W (8Ω 1kHz THD 0.1%) 170W + 170W (4Ω 1kHz THD 0.1%)		

VIDEO INPUT/OUTPUT SPECIFICATIONS

ST3 input(A,B,C,D) (S-VIDEO) (VIDEO)	Mini-DIN Phono Jack	4	1Vp-p(Y) 1Vp-p		75Ω 75Ω
Master output Rec output (S-VIDEO) (VIDEO)	Mini-DIN Phono Jack	2	1Vp-p(Y) 1Vp-p		75Ω 75Ω

CONTROL TERMINAL SPECIFICATIONS

RS-232C terminal	D-sub 9 male	1	7 function is controled
CONTROL-S input	φ 3.5 jack	1	
CONTROL-S output	φ 3.5 jack	1	Through out from input
EMG CONTROL	Screw type terminal	1	Break contact, 24V signal control (Active "break")

OTHER TERMINALS

Antenna in	BNC	2	DC 9V out	20mA max
+48Vphantom power	Power supply for MIC 1 to 4 XLR terminals only			

ELECTRICAL CHARACTERISTICS

	ITEM	MEASUREMENT CONDITIONS	STANDARD
AUDIO SYSTEM	Frequency characteristics	20 to 20kHz, 1kHz reference, master output	+0.5, -1dB
	Total harmonic distortion	MIC IN-Master output, 1kHz -54dBu input ST input -Master output, 1kHz -10dBu input	less than 0.05% less than 0.01%
	Input conversion noise level	MIC IN input, 150Ω termination, IHF-A	less than -126dBu
	S/N ratio	ST input, input short, IHF-A	more than 85dB
	Rasidual noise level	Master volume 0, IHF-A, Speaker output	less than 100μV
	Crosstalk	1kHz, between L-R channels 1kHz, between input channels	less than -60dB less than -80dB
	TONE	MIC L.C.F fc=100Hz TREBLE 10kHz (shelving type) BASS 60Hz (peaking type)	-12dB/oct ±12dB ±12dB
VIDEO SYSTEM	Frequency characteristics	50 to 10MHz, reference 3.58MHz	+0.5dB, -1dB
	Crosstalk	3.58MHz, 1Vp-p	less than -50dB
	S/N ratio	100kHz, H.P.F, 5MHz, L.P.F	more than 65dB
S-VIDEO	Frequency characteristics	50 to 10MHz, reference 3.58MHz	+0.5dB, -1dB
	Crosstalk	3.58MHz, 1Vp-p	less than -50dB
	S/N ratio	100kHz, H.P.F, 5MHz, L.P.F	more than 65dB

Power requirment	AC 120V 50/60Hz (E) AC 230V 50/60Hz (AEP)
Power consumption	400W
Dimensions	482 × 132 × 350 (width/height/depth) mm not includeing max protrusion
Weight	15kg
Operating temp.	0°C to 40°C
Storage temp.	-20°C to 60°C
Suplied accessories	Operating instructions (1) Remote control (SRP-351RM) (1) Battery R6 SIZE AA (2)

オーディオ系入出力仕様

名称	端子形状	回路数	基準入出力レベル	最大入出力レベル	入出力インピーダンス
MIC IN (REAR) (FRONT)	XLR-3-31 PHONE	4	-54dBu	-24dBu	2.2kΩ
ST1 input	PIN	1(Stereo)	-10dBu	+20dBu	20kΩ
ST2 input	PIN	1(Stereo)	-10dBu	+20dBu	20kΩ
ST3 input(A,B,C,D)	PIN	4(Stereo)	-10dBu	+20dBu	20kΩ
Echo return input	PIN	1(Stereo)	-10dBu	+10dBu	20kΩ
Mic group output	PIN	1	-10dBu	+10dBu	470Ω
Echo send	PIN	1	-10dBu	+10dBu	470Ω
Master output	PIN	1(Stereo)	-5dBu	+15dBu	470Ω
Rec output	PIN	1(Stereo)	-10dBu	+10dBu	470Ω
Speaker output	ネジ式* ターミナル	1(Stereo)	定格出力 125W + 125W (8Ω 1kHz THD 0.1%) 170W + 170W (4Ω 1kHz THD 0.1%)		

*スピーカーターミナルにはJIS 5Aタイプのラグ端子が使用可能

ビデオ系入出力仕様

ST3 input(A,B,C,D) (S-VIDEO) (VIDEO)	Mini-DIN PIN	4	1Vp-p(Y) 1Vp-p		75Ω 75Ω
Master output Rec output (S-VIDEO) (VIDEO)	Mini-Din PIN	2	1Vp-p(Y) 1Vp-p		75Ω 75Ω

制御端子仕様

RS-232C端子	D-sub 9 オス inch ネジ	1	7線式フルフローコントロール
CONTROL-S入力	Mini	1	
CONTROL-S出力	Mini	1	入力からのスルーアウト
EMG CONTROL	ネジ端子台	1	ブレーク接点制御、24V信号制御

その他

AC OUTLET	——	3	連動 最大100W x 2 非連動 最大100W x 1
Antenna in	BNC	2	DC 9V out
+48Vファンタム電源	MIC1～4 XLR端子のみ給電		

電気的性能

	項目	条件	規格
オーディオ	周波数特性	20～20MHz 1kHz基準 master 出力	+0.5, -1dB
	全高調波歪率	MIC IN-Master output 1kHz -54dBu入力 ST入力-Master output 1kHz -10dBu入力	0.05%以下 0.01%以下
	入力換算雑音	MIC IN 入力150Ω終端 IHF-A	-126dBu以下
	S/N比	ST1～3 入力 入力ショート IHF-A	85dB以上
	残留雑音レベル	Masterボリューム0 IHF-A Speakers output	100μV以下
	クロストーク	1kHz L-R間 1kHz チャンネル間	-60dB以下 -80dB以下
	TONE	MIC L.C.F fc=100Hz TREBLE 10kHz (シェルビングタイプ) BASS 60Hz (ピーキングタイプ)	-12dB/oct ±12dB ±12dB
ビデオ	周波数特性	50～10MHz 3.58MHz基準	+0.5dB, -1dB
	クロストーク	3.58MHz, 1Vp-p	-50dB以下
	S/N比	100kHz, H.P.F, 5MHz, L.P.F	65dB以上
S-VIDEO	周波数特性	50～10MHz 3.58MHz基準	+0.5dB, -1dB
	クロストーク	3.58MHz, 1Vp-p	-50dB以下
	S/N比	100kHz, H.P.F, 5MHz, L.P.F	65dB以上

電源	AC100V 50/60Hz
消費電力	300W
外形寸法	482 x 132 x 350 (幅/高さ/奥行き) 突起部含まず
質量	15kg
動作温度	0℃～40℃
保存温度	-20℃～60℃
付属品	取扱説明書 (1) 保証書 (1) リモコン (SRP-351RM) (1) 単3形乾電池 (2) ソニーサービス窓口・ご相談窓口のご案内 (1)

サービス、点検時には次のことにご注意下さい。

1. 注意事項をお守り下さい。

サービスのとき特に注意を要する箇所については，キャビネット，シャーシ，部品などにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書等の注意事項を必ずお守り下さい。

2. 指定部品のご使用を

セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は，使用されていたものと同じ特性の部品を使用して下さい。 特に回路図，部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用下さい。

3. 部品の取付けや配線の引きまわしはもとどおりに

安全上，チューブやテープなどの絶縁材料を使用したり，プリント基板から浮かして取付けた部品があります。 また内部配線は引きまわしやクランパによって発熱部品や高圧部品に接近しないよう配慮されていますので，これらは必ずもとどおりにして下さい。

4. サービス後は安全点検を

サービスのために取外したネジ，部品，配線がもとどおりになっているか，またサービスした箇所の周辺を劣化させてしまったところがないかなどを点検し，安全性が確保されていることを確認して下さい。

5. チップ部品交換時の注意

- 取り外した部品は再使用しないで下さい。
- タンタルコンデンサのマイナス側は熱に弱いため交換時は注意して下さい。

6. フレキシブルプリント基板の取扱について

- コテ先温度を270℃前後にして行なって下さい。
- 同一パターンに何度もコテ先を当てないで下さい。
  （3回以内）
- パターンに力が加わらないよう注意して下さい。

7. 電池の交換は，正しく行わないと爆発するおそれがあります。

電池を交換する場合には，必ず同じ型名の電池または機器製造者が指定した同等品以外のものとは交換しないようにして下さい。
使用済みの電池は，製造者の指示に従って処分して下さい。

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

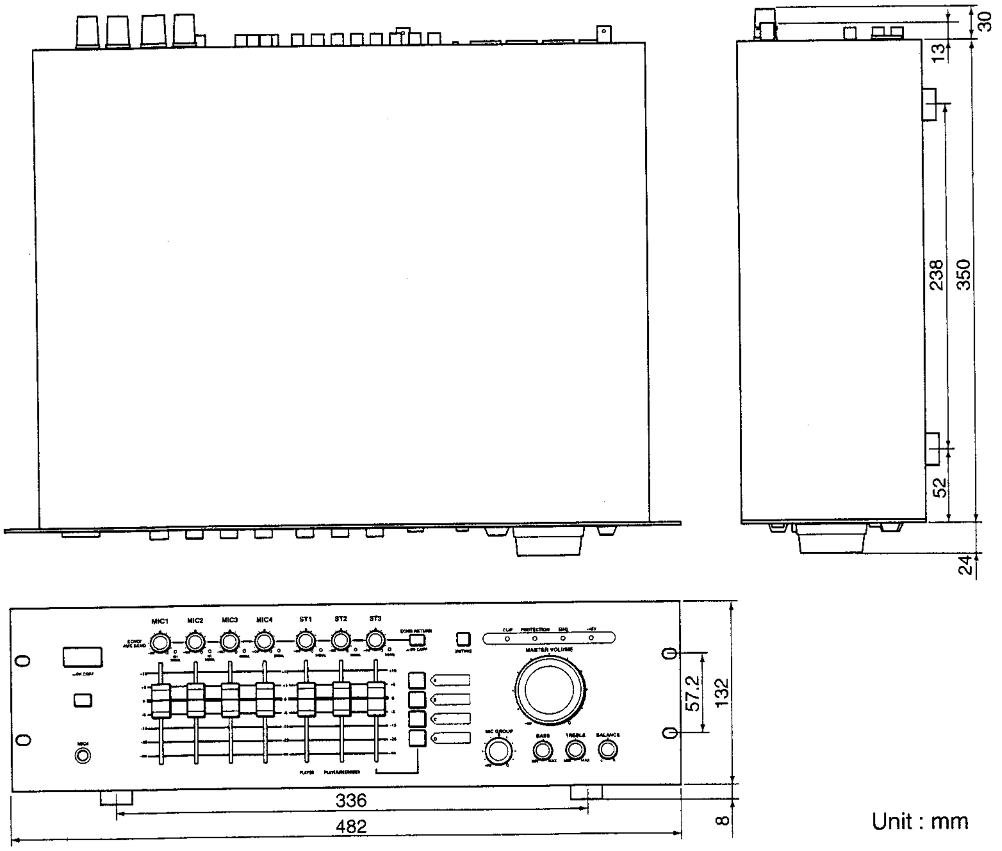
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer.
Discard used batteries according to the manufacturer's instructions.

Dimensions



Unit : mm

SECTION 1
GENERAL

取扱説明書を抜粋し，そのまま記載しています。

主な特長

170W＋170W（4Ω）のパワーアンプと4マイク、3ステレオ入力のミキサーを合体。さらにワイヤレスマイクにも対応した設備用パワードミキサー

4本のマイク入力の内2本ワイヤレス対応、また3系統のステレオ入力の内1系統には4in-1outのセレクターを装備、合計6台のステレオ入力に応えます(別売りチューナーユニットSRP-800RA2台裏面に装着可能）。

ビデオ入力対応

ステレオ入力（ST3）は4台のビデオ機器に対応。Sビデオ入力も4系統分用意されております(ビデオ、Sビデオは相互に変換できません)。

ワイヤレスリモコン付属

付属のワイヤレスリモコンでST3系統のセレクターとマスターボリューム、ミューティングボタンのコントロールが可能。また、ソニーのCDプレイヤー、MDプレイヤー、カセットデッキの基本操作機能*も搭載しました。

* ワイヤレスリモコン付属機器およびコントロールS端子装備機器のみ操作可能。

レコーダー機器専用入力端子を用意

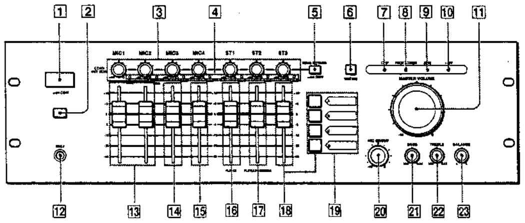
ライン入力ST2は、自身の信号の回り込みによる発振を防ぐ様、RECバスから切り離しました。

豊富な入出力端子、多彩な機能を装備

1. イコライザーやフィードバックリデューサー等のエフェクターを接続するグループインサート/マスターインサート端子を装備。
2. エコー装置の接続に便利なエコーセンド/リターン端子を装備。
3. マイクの音声信号をマスター出力からカットするアサインスイッチを装備。AV機器の音声をマスター出力から、マイクの音声はマイクグループ出力からと分けて出力できることにより、本格的な視聴覚AVシステム構築が可能。
4. コントロールS端子を装着。
5. 外部PCからのリモート制御可能なRS-232Cリモート端子を装備。
6. EIA規格19インチラックにマウント可能（3Uサイズ）。

各部の名称と働き

前面



1 POWER（電源）ボタン

スイッチを押すと電源が入ります。

2 ワイヤレスリモコン受光部

赤外線ワイヤレスリモコン信号を受光します。
この部分をおおうとリモコンが効かなくなる事があります。なるべくリモコンが使いやすい位置になるように設置してください。

3 ECHO/AUX SENDつまみ

各チャンネルフェーダー通過後の信号を調節し、ECHO SEND端子へ出力します。

4 RF/SIGNALインジケーター

基準入力レベルに対して-20dB以上の音声入力があると、チャンネルフェーダーの位置に関係なく点灯します。
MIC1/MIC2は、ワイヤレスチューナー装着時、ワイヤレスマイクの電源[ON]で、信号を受信すると点灯します。

5 ECHO RETURNスイッチ

[ON]にするとECHO RETURN入力からの信号がマスター系にアサインされます。
例えば、カラオケ使用時には[ON]にしてエコーをかけ、司会などが入るときは[OFF]にすると、すぐにエコーを切る事ができます。

6 MUTINGボタン

MASTER OUTPUT、MASTER INSERT、ECHO SEND、MIC GROUP OUT、SPEAKER 各出力端子の出力をミューティングします。

7 CLIPインジケーター

パワーアンプの出力レベルが過大で、信号が歪みはじめると、点灯します。
このような時は、点灯しなくなる所までマスターボリュームまたはMIC/LINEレベルつまみを下げてご使用ください。
長時間過大な信号を出し続けると、オーバーヒートやスピーカー破損の原因になります。

8 PROTECTIONインジケーター

保護回路が動作中、点灯します。
POWERスイッチをONにすると点灯しますが、アンプの動作が安定すると消灯します。

9 EMGインジケーター

非常用放送設備からの信号を受けて、本機のAUDIO出力がMUTINGした状態になった時、EMGランプが点灯します。
EMGについては、P.7 5 を参照してください。

10 ＋48Vインジケーター

MIC入力端子を通してファンタム電源（DC＋48V）が供給されている時点灯します。

11 MASTER VOLUME

MASTER OUTPUT、SPEAKER端子の音量を調節します。

12 MIC4端子

MIC4有線マイクの前面入力端子です。
ここに入力すると、裏面からの入力はカットされ、こちらが優先されます。

13 MIC1/MIC2フェーダーつまみ

MIC1/MIC2のミキシングレベルを調節します。
MIC1/MIC2では、ワイヤレスマイクと有線マイクのどちらかを使用する事ができます。

14 MIC3フェーダーつまみ

MIC3のミキシングレベルを調節します。
MIC3は有線マイクのみとなります。

15 MIC4フェーダーつまみ

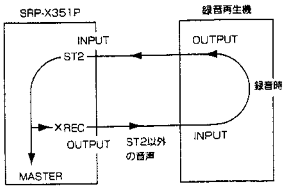
MIC4のミキシングレベルを調節します。

16 ST1フェーダーつまみ

ST1のミキシングレベルを調節します。主に再生機器を接続します。

17 ST2フェーダーつまみ

ST2のミキシングレベルを調節します。
このチャンネルの音声はREC OUTPUT端子に出力されません。したがってフェーダーを上げたまま録音を行なっても、信号のループができずに安全に録音が行なえます。(イラスト参照)



18 ST3フェーダーつまみ

19のSELECTボタンで選択されたAV機器の信号レベルを調節します。

19 SELECTボタン

ST3 A~D入力に接続された機器を選択します。
選択された入力のS VIDEO、VIDEO信号はそのままMASTER OUTPUT 、REC OUTPUTに出力されます。
音声信号は、ST3フェーダーつまみでミキシングレベルを調節できます。

20 MIC GROUPつまみ

MIC1~4のミキシングされた後の信号レベルを一括して調節します。

21 BASSつまみ

MASTER OUTPUT、SPEAKER出力の低音を調節する時に使用します。

22 TREBLE調節つまみ

MASTER OUTPUT、SPEAKER出力の高音を調節する時に使用します。

23 BALANCE調節つまみ

MASTER OUTPUT、SPEAKER出力のL・Rバランスを調節します。

ご注意

PROTECTIONランプが点灯した場合

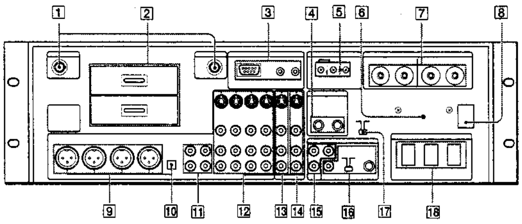
次のような場合は、保護回路が動作して（PROTECTIONインジケーターが点灯）、出力をカットすることによって、スピーカーやアンプを保護します。

- 故障によりDC（直流電圧）がSPEAKER端子に現れた場合。
- アンプ内部の放熱器の温度が規定値を超えた場合。
- 接続したスピーカーのインピーダンスが低すぎる場合、またはSPEAKER端子をショートした場合。

このような場合はPOWERスイッチをOFFにし、原因を取り除いた後にご使用ください。

各部の名称と働き

裏面



1 ANT IN（アンテナ入力）A/B端子

ワイヤレスチューナー用アンテナの入力端子です。
チューナーユニット装着時には別売のUHFアンテナSRP-800ANまたはAN-820を接続してください。
この端子からはアンテナ内のブースター用電源9Vを出力していますので、上記以外のアンテナを接続するとうまく作動しなかったり、故障の原因となったりすることがあります。

ご注意

アンテナの設置・接続は、アンテナに付属の取扱説明書をよくお読みのうえ、行なってください。
アンテナの設置が不適当な場合、音声が途切れるなどの受信不良の原因となることがあります。特にアンテナ取付後、取付場所の変更が容易にできない場合は、事前に充分な動作確認を行なった上で取り付けてください。
ケーブルにはインピーダンス50Ω/75Ωの同軸ケーブル（5D-FB、5C-2Vなど）をお使いください。5D-FBで約50mまで、5C-2Vで約25mまで延ばすことができます。

2 チューナーユニット用スロット(MIC1、MIC2)

別売りの800MHz帯ワイヤレスチューナーユニットSRP−800RAを装着するスロットです。2台まで装着できます。（装着方法については9ページをご覧ください。）
装着はSRP−800RAの取扱説明書もよくお読みの上、行なってください。

3 REMOTE端子

CONTROL S入力端子

他の機器のコントロールS出力端子に接続します。
この端子にプラグを挿している時本機の受光部は機能しません。
入力された信号はそのままコントロールS出力端子から出力されます。

CONTROL S出力端子

CONTROL S入力端子または、受光部からの入力信号を出力します。

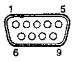
RS-232C（シリアル入出力）端子

パーソナルコンピューター等で本機をコントロールする時に使います。

コンピューターとの接続

クロスケーブルを用い本機のRS-232C 端子に接続します。
RS-232C 端子の仕様は次のようになります。

端子形状	D-SUB9ピン オス インチネジタイプ
電気的仕様	RS-232C規格準拠
推奨ケーブル	データ通信用多芯シールドケーブル
ケーブル長	15m以下



ピンNo.	信号	機能
1	N.C	未接続
2	RD	受信データ
3	TD	送信データ
4	ER	データ端末レディー
5	SG	信号線グランド
6	DR	データセットレディー
7	RS	送信要求
8	CS	送信可
9	N.C	未接続

4 MASTER INSERT(先端：出力、リング：入力、スリーブ：GND)

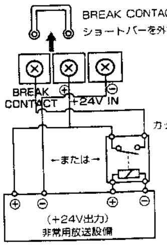
MASTER OUTPUTのINSERT 入出力端子です。マスターボリューム以前に外部機器を挿入できます。グラフィックイコライザーなどを接続します。

5 EMG入力端子

非常用放送設備からの信号を受けて、本機のAUDIO出力をMUTING状態にします。この場合、本機のEMGランプが点灯します。
接続方法は次の2通りが選択可能です。なお、本機を非常用放送設備の一部として使用することはできません。

BREAK CONTACT端子を使用する場合
ショートバーをはずし、非常用放送設備のカットリレーを接続します。
リレー接点が開放時、本機のAUDIO出力は全てMUTING状態になります。

+24V IN端子を使用する場合
非常用放送設備から直流24V信号を受けます。
24V遮断時、本機のAUDIO出力は全てMUTING状態になります。



6 CIRCUIT BREAKER

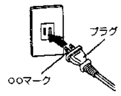
本機の電源に過電流が流れた時、サーキットブレーカーが作動し、電源を切ります。そのような場合は、過電流の原因を取り除き、ブレーカーのRESETボタンを押してリセットしてください。

7 SPEAKER端子

スピーカーを接続する端子です。赤色の端子にスピーカーの"+"を、黒色の端子にスピーカーの"−"を接続してください。
スピーカーのインピーダンスは 4〜16Ωの物をご使用ください。

8 電源コード

良好な音質を維持する為、電源プラグのアース側には丸2つの刻印（○○）がついています。刻印が入っている側を壁のコンセントの差し込み口の長い方（アース側）に差し込んでください。
この場合、本機のAC OUTLETの下側（ライン側）もアース側になります。



9 MIC入力端子

（1: GND 2: HOT 3: COLD）
マイク用の入力端子です。
MIC1、MIC2は、チューナーユニット装着時にはワイヤレスマイク優先です。（4ページ4参照）
ワイヤレスマイクの電源ボタンをONにするまで、ワイヤードマイクが使用できます。

10 +48Vボタン

MIC1〜4端子にコンデンサマイクロホン用のファンタム電源（DC+48V）を供給するボタンです。このボタンを[ON]にすると前面のMIC4端子以外のMIC端子にDC+48Vが出力されます。

注意
- ケーブルを抜き挿しする場合や、+48Vボタンを[ON]にする場合は、必ずMICフェーダーを全て絞ってから行なってください。
- ライン機器は必ずST1-ST3入力に接続してください。
- +48V電源を使用するマイクロホンとダイナミックマイクロホンが混在する場合には、ダイナミックマイクロホンの性能が十分に発揮できない場合があります。

11 ST1/ST2入力端子

オーディオ機器用の入力端子です。
ST1には主に再生専用機器、ST2には、録音を行なうオーディオ機器を接続します。

12 ST3(AV)入力機器

AV機器用の入力端子です。
入力A〜Dは前面のSELECTボタンで選択されます。

13 MASTER OUTPUT端子

マスターボリュームを通過した信号が出力されます。

14 REC OUTPUT端子

音質調整（TREBLE,BASS）、BALANCEおよびマスターボリュームを通らない信号が出力されます。

各部の名称と働き

映像信号はMASTER OUTPUTの信号と同じです。

15 ECHO SEND/RETURN端子

リバーブレーターやディレイマシン等のエフェクターを接続する端子です。

SEND端子
MIC1〜MIC4、ST1〜ST3のECHO/AUX SENDつまみでミックスした音声信号がモノラルで出力されます。

RETURN端子
エフェクターから戻ってきた信号の入力端子です。前面のECHO /RETURNスイッチがONの時L/Rにそれぞれ入力されます。入力レベルはエフェクター側で調節します。

16 MIC GROUPとASSIGNスイッチ

MIC GROUP OUTPUT端子
MIC GROUPつまみでレベルを調節された信号を出力します。

ASSIGN（アサイン）スイッチ
通常は[ON]で使用します。
このスイッチを[OFF]にすると、マイクの音声はMASTER OUT PUTやSPEAKER出力から切り離されます。
天井スピーカーを用いた拡声系統を加えた場合にOFFにします。

INSERT端子（先端：出力、リング：入力、スリーブ：GND）
外部にグラフィックイコライザーやフィードバックリデューザーなどを接続することができます。

17 MODEスイッチ

MONO側にすると、MASTER INSERT、MASTER OUTPUT、SPEAKER出力がモノラルになります。

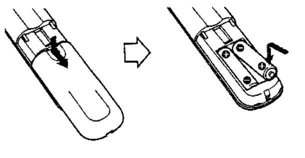
18 AC OUTLET端子

SWITCHED（連動）、UNSWITCHED（非連動）共、各々100W、合計300WまでのAV機器を接続することができます。

警告
上記の最大消費電力を超える機器を接続して使用すると故障の原因となるだけでなく、火災などの原因となる場合がありますので、絶対に避けてください。

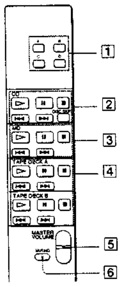
リモコンに電池を入れる

⊕と⊖の向きを合わせて、単3形乾電池(付属)2個を入れます。



乾電池の寿命は約6か月です
残りが少なくなると、リモコンで操作できる距離が短くなります。これを目安にして、2個とも新しい乾電池に交換してください。

リモコン



1 FUNCTIONスイッチ

ST3 A〜D入力を選択できます。

2 CDデッキ操作ボタン

ソニー製のCDデッキを操作できます。

3 MDデッキ操作ボタン

ソニー製のMDデッキを操作できます。

4 TAPEデッキ操作ボタン(A,B)

ソニー製のTAPEデッキを操作できます。

5 MASTER VOLUME操作つまみ

MASTER VOLUMEの調節ができます。

6 MUTINGスイッチ

MASTER OUTPUT, MASTER INSERT, ECHO SEND, MIC GROUP OUTPUT, SPEAKER出力の各出力信号をMUTINGします。

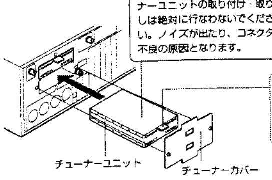
チューナーユニットの装着方法

1 本機の電源を切ります。

2 あらかじめチューナーユニットとワイヤレスマイクのグループチャンネルを合わせておいてください。また、これらをまちがえないようチューナーユニットに付属のチャンネル表示ラベルを貼り付けておいてください。

3 ⊕ドライバーを使いチューナーカバーを外します。

奥までしっかりと差し込んでください。電源がONのときはチューナーユニットの取り付け・取り外しは絶対に行なわないでください。ノイズが出たり、コネクター不良の原因となります。



⚠注意
チューナーユニットを出し入れする際は、必ずこのつまみを持って行なってください。

4 チューナーユニットのチャンネルを確認し、表示面を下に向けて差し込みます。上のスロットがMIC1、下がMIC2に対応しています。

5 チューナーカバーを取り付けます。
チューナーユニットを入れた後、本機の電源を入れ、ワイヤレスマイクの電源スイッチを[ON]にして、受信状態になっていることを確認してください。受信状態の時はRF/SIGNALインジケーターが点灯します。マイクの設定チャンネルがチューナーユニットの設定と異なっている時や、マイクの電源が消耗しているときはRF/SIGNALインジケーターは点灯しませんので注意してください。

故障とお考えになる前に

電源が入らない	• 電源コードがぬけていませんか • サーキットブレーカーが動作していませんか（7ページ）
音が出ない	• EMGインジケーターは消灯していますか（4ページ、7ページ） • PROTECTIONインジケーターは消灯していますか（4ページ）
MASTER OUTPUTやSPEAKER端子にマイクの音が出ない	• ASSIGNスイッチがOFFになっていませんか（8ページ） • MIC GROUPつまみが−∞になっていませんか（5ページ）
ワイヤレスマイクの音が出ない	マイクのチューナーユニットのチャンネルは合っていますか。また、マイクの電源をONにした時、RF/SIGNALインジケーターは点灯しますか（9ページ）
音にステレオ感がない	MODEスイッチはSTEREOになっていますか（8ページ）
音が歪む	CLIPインジケーターが点灯していませんか（4ページ）
MIC4の音が出ない	フロントパネルのMIC4端子に別のマイクがつながっていませんか（4ページ）
ワイヤレスリモコンで操作できない	• リアパネルのCONTROL-S入力端子にプラグがささっていませんか（6ページ） • リモコンの電池がなくなっていませんか
REC OUTPUTからST2入力の音が出ない	ST2の音はREC OUTPUTに出力されません（5ページ）

保証書とアフターサービス

保証書について

この製品には保証書が添付されていますので、お買い上げの際お受け取りください。
所定事項を記入および記載内容をお確かめのうえ、大切に保存してください。
保証期間は、お買い上げ日より1年間です。

アフターサービス

調子が悪いときはまずチェックを
この説明書をもう1度ご覧になってお調べください。

それでも具合いの悪いときは
お買い上げ店、または添付の「サービス窓口・ご相談窓口のご案内」にあるお近くのサービス窓口にご相談ください。

保証期間中の修理は
保証書の記載内容に基づいて修理させていただきます。詳しくは保証書をご覧ください。

保証期間経過後の修理は
修理によって機能が維持できる場合は、ご要望により有料修理させていただきます。

部品の保有期間について

当社では音響機器の補修用性能部品(製品の機能を維持するため必要な部品)を、製造打ち切り後最低8年間保有しています。この部品保有期間を修理可能の期間とさせていただきます。保有期間が経過した後も、故障箇所によっては修理可能な場合がありますので、お買い上げ店か、サービス窓口にご相談ください。なお、補修用性能部品の保有期間は通商産業省の指導にもよるものです。

ご相談になるときは、次のことをお知らせください
- 型式：SRP-X351P
- 故障の状態：できるだけ詳しく
- ご購入年月日

ソニー株式会社　〒141-0001 東京都品川区北品川6-7-35

お問い合わせはお客様ご相談センターへ
●東京(03)5448-3311 ●名古屋(052)232-2611 ●大阪(06)6539-5111

Printed in Japan

This section is extracted from instruction manual.

Main Feature

Powered Mixer Has 170W+170W(4Ω) Power Amplifier, and 4 Microphones, 3 Line Inputs.
Built-in power amplifier satisfy a small PA system with 170W+170W (4Ω) output.
Mixing of 4 microphone inputs and 3 stereo (line) inputs
Line input (ST3) can be select 4 AV's one.

Wireless Tuner Unit Can Be Installed
Two UHF SYNTHESIZED TUNER UNIT WRU-801A or WRU-806A can be installed.
Wireless microphone system can be easy to setup.
Wireless Remote Controller supplied
AV input selection, master volume and MUTING can be controlled.
Simple work of Sony's CD player or MD player, Cassette Deck can be operated*.

* AV equipment supplied with a wireless remote control or with Control-S terminal only

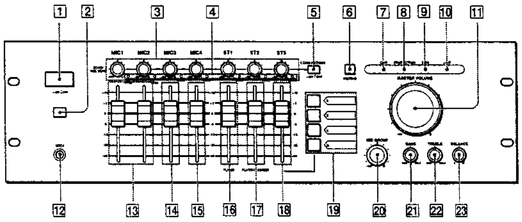
Exclusive Input Connectors for Recording Equipment
Line input (ST2) is separated from REC bass to avoid oscillation come from flowing of its own signal.

Enough Number of Input/Output Terminals, Various Function

1 The master input to connect equalizer or limiter.
2 The ECHO SEND/RETURN terminals for connect Echo equipment
3 The ASSIGN SWITCH cuts the microphone signals from MASTER OUTPUT.
4 Tone control (BASS, TREBLE), BALANCE switch of stereo/monaural and MUTING button.
5 The MIC GROUP knob for centralized control of summing signal from 4 microphone inputs.
6 The CONTROL-S terminal
7 The RS-232C REMOTE terminal
8 EIA standard 19 inch rackmountable (3U high)

Names and Functions

Front panel



1 POWER button
Pressing it turns on the power.

2 Wireless remote control sensor
It catches the signal from the infrared wireless remote control.
If this sensor is covered by something, the remote control may not function correctly. Place the unit so that the sensor will be easy to receive the remote control signal.

3 ECHO/AUX SEND knob
It adjusts the mixed signals after each channel fader and outputs to the ECHO SEND terminal.

4 RF/SIGNAL indicators
They light up regardless of the position of channel fader when sound signal of more than -20dB to the standard input level are input.
As for MIC 1/MIC 2 would be light up when it received the signal while the wireless tuner unit is installed and switch of the microphone is turned on.

5 ECHO RETURN switch
When it is ON, the signal from the ECHO RETURN input are assigned to L/R and Rec Bus.

6 MUTING button
Use muting outputs from MASTER OUTPUT, MASTER INSERT, ECHO SEND, MIC GROUP OUT, and SPEAKER output terminals.

7 CLIP indicator
Too high an output level will cause signal distortion and make the CLIP indicator light up. When this happens, lower the MASTER volume or the MIC/LINE level knob until the indicator turns off. If too much signal output for an extended period, it may cause the equipment to overheat or to damage the speakers.

8 PROTECTION indicator
It lights up while the protection circuit is working. When the power is turned on, it also lights up for few seconds and it turns off when the amplifier become stable.

9 EMG indicator
It lights up when the unit receives a signal from the emergency broadcast facilities and turns to standby. As for EMG, refer to P. 7 5.

10 +48V indicator
It lights up while the Phantom power (DC+48V) is supplied through the MIC input terminal.

11 MASTER VOLUME
Use to adjust the volume of MASTER OUTPUT and SPEAKER terminal.

12 MIC 4 terminal
This is input terminal in front for wired microphone. If the wired microphones are connected to the MIC 4 terminals both at front and rear panel, the front input is given priority.
Note : When you use the MIC 4, check the balanced connection.

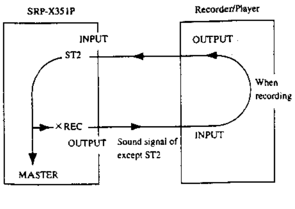
13 MIC 1/MIC 2 fader knobs
Use to adjust the mixing level of MIC 1/MIC 2.
Either the wireless microphone or the wired microphone can be used in MIC 1/MIC 2.
(Refer to page 6 and page 9.)
When the WRU-801A or WRU-806A (optional) is put in to the tuner unit compartment at the rear panel, the wireless microphone is given priority while it is on.

14 MIC 3 fader knob
Use to adjust the mixing level of MIC 3.
Only the wired microphone can be used in MIC 3.

15 MIC 4 fader knob
Use to adjust the mixing level of MIC 4.

16 ST1 fader knob
Use to adjust the mixing level of ST1.
A playback unit will be connected to it mainly.

17 ST2 fader knob
Use to adjust the mixing level of ST2.
The sound signal of this channel is not output to the REC OUTPUT terminal; you can use without being bothered about oscillation from signal loop.



18 ST3 Fader knob
Use to adjust the level of the signal from AV equipment selected by the SELECT button stated in 19.

19 SELECT buttons
Use to select one of the unit connected to ST3 A to D input.
S VIDEO and VIDEO signal from the selected input is directly output to the MASTER OUTPUT and the REC OUTPUT.
The mixing level of the sound signal can be adjusted by ST3 fader knob.

20 MIC GROUP knob
Use to adjust the level of the signal after mixing in MIC 1 to 4 in a lump.
The signal will be output from the MIC GROUP OUT terminal.

21 Bass control knob
Use to adjust low frequency among the sound from the MASTER OUTPUT or SPEAKER terminal.

22 TREBLE control knob
Use to adjust high frequency among the sound from the MASTER OUTPUT or SPEAKER terminal.

23 BALANCE adjustment knob
Use to adjust the balance of left and right of the sound from the MASTER OUTPUT or SPEAKER terminal.

Note

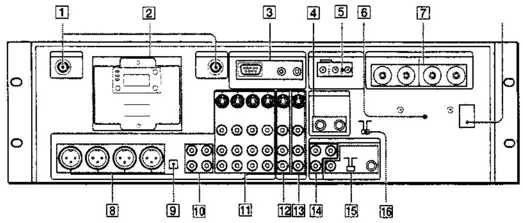
When the PROTECTION indicator lights up
The protection circuit triggers and the PROTECTION indicator lights up in following conditions. In this case, the speaker and amplifier are protected by cutting output.

- When direct-current voltage appears in the SPEAKER terminal from a malfunction.
- When rated temperature of amplifier internal heat sink is exceeded.
- When impedance of the connected speaker is too low, or when speaker outputs are shorted.

When the above happens, turn off the POWER switch, find and fix the cause of the problem, and restart.

Names and Functions

Rear panel



1 ANT IN (antenna input) A/B terminals
Use to connect the antenna for wireless tuner. When installing the tuner unit, connect the optional UHF antenna WRU-801A/WRU-806A.
As these terminals output DC power of 9V for the booster inside of the connected antenna, connection of any antenna other than stated above may cause bad performance or a malfunction.
(the max supply current is 20 mA)

Note
Before locating and connecting the antenna, read carefully the instructions supplied with the antenna.
Incorrect location of the antenna may cause a bad reception such as intermittent sounds. If it is not easy to relocate the antenna after location, check carefully if the performance will be satisfied with the location.
Use the coaxial cable of impedance 50 ohms/75 ohms (5D-FB, 5C-2V, etc.). The cable can be extended up to about 50 m with 5D-FB, and up to about 25 m with 5C-2V.

2 Tuner unit slot (MIC1, MIC2)
These are for installation of the optional 800MHz wireless tuner unit WRU-801A/ WRU-806A. Up to two units can be installed. (Refer to page 9 how to install.)
Before installation, read carefully also the instructions of WRU-801A/ WRU-806A.

3 REMOTE terminals

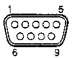
CONTROL S input terminal
Connect to the S output terminal of another equipment.
When this terminal is plugged in, the sensor of this unit is not functioning.
Input signals are directly output from control S output terminal.

CONTROL S output terminal
This terminal outputs the signal input from CONTROL S input terminal or the sensor.

RS-232C (serial input/output) terminal
Use to control this unit with a personal computer.

Connecting to a computer
Connect the computer to the RS-232C terminal of this unit with a cross cable.

Terminal figure	: D-sub 9 pin, male, inch type screw
Electrical specification	: Based on RS-232C standard
Recommended cable	: Plural leads shield cable for data communication
Cable length	: 15m or under



Pin No.	Signal	Function
1	N.C	Not connected
2	RD	Received data
3	TD	Transmission data
4	ER	Data terminal ready
5	SG	Signal line grand
6	DR	Data set ready
7	RS	Transmission request
8	CS	Transmission approval
9	N.C	Not connected

4 MASTER INSERT (Tip: output, Ring: input, Sleeve: GND)

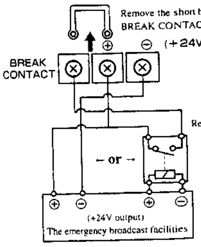
These are input/output terminals for MASTER OUTPUT. An external equipment can be inserted before master volume.

5 EMG input terminals

This terminal receives signal from the emergency broadcast facilities and makes this unit be in standby. In this case, the EMG indicator on the front panel lights up.
Select one of following two ways of connection as follows.

When using the BREAK CONTACT terminal
Remove the short bar and connect the Relay of the emergency broadcast facilities. When the relay is contact is breaked, all AUDIO outputs of this unit will be cut off.

When using the +24V IN terminal
This terminal receives signals of DC24V from the emergency broadcast facilities.
When DC24V is cut off, all AUDIO outputs of this unit will be cut off.


Remove the short bar of the BREAK CONTACT terminal
⊕
⊖
(+24V IN)
BREAK CONTACT
Relay
← or →
⊕ ⊖ ⊕ ⊖
(+24V output)
The emergency broadcast facilities

6 CIRCUIT BREAKER

When over-current flows into the unit, the circuit breaker cuts the power. In this case, remove the cause of over-current and reset the breaker by pressing RESET button.

7 SPEAKER output terminals

Connect with the speakers. Connect + of the speaker to the red terminal and - to the black terminal. Use the speaker of 4 to 16 impedance.

8 MIC input terminals (1:GND 2:HOT 3:COLD)

This is the input terminals for microphones.
In MIC1 and MIC2, wireless microphone has priority while the tuner unit is used. (Refer to page 4[4].)

9 +48V button

It supplies the Phantom power (DC+48V) to the MIC 1 - 4 terminals for condenser microphones.
When it is ON, DC+48V is output for the MIC terminals except for the MIC4 on the front panel.

Notes
- Make sure to turn the MIC fader toward minimum before connecting or disconnecting any cable or turning the +48 button to ON.
- Make sure to connect a line equipment to ST1 to ST3 inputs.
- When using a microphone powered by +48V and a dynamic microphone simultaneously, the dynamic microphone may not show its performance to the full.

10 ST1/ST2 input terminals

Use them for inputs from audio equipment.
Connect a playback equipment mainly to ST1 and a record player to ST2.

11 ST3 (AV) input terminals

Use them for inputs from AV equipment.
Each of input A to D is selected by the SELECT button on the front panel.

12 MASTER OUTPUT terminals

Signal routed through the Master Volume are output here.

13 REC OUTPUT terminals

Signal not routed through the tone control (BASS, TREBLE), BALANCE and Master Volume are output here.
Video signal is the same as for MASTER OUT signal.

Names and Functions

14 ECHO SEND/RETURN terminals

Connect effectors such as reverbrators and delay units to this terminal.

SEND terminal
This terminal outputs audio signals mixed by ECHO/AUX SEND knob of MIC1 to MIC4 and ST1 to ST3 in monaural

RETURN terminals
This is an input terminal for signal returned from the effector. When the ECHO RETURN switch on the front panel is set to ON, these are assigned to L and to R.
Adjust the input level using effector's level controller.

15 MIC GROUP and ASSIGN switch

MIC GROUP OUTPUT terminal
It outputs signal of which level is adjusted by MIC GROUP knob.

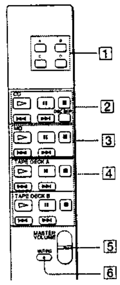
ASSIGN switch
This is normally on.
When this switch is set to OFF, the microphone signal for MASTER OUTPUT and SPEAKER terminals are cut off.
Using this, turn it OFF when a PA system with ceiling speakers and external power amplifier.

INSERT terminal (Tip: output, Ring: input, Sleeve: GND)
Use it to connect an external graphic equalizer or a feedback reducer.

16 MODE switch

It will be monaural when MASTER INSERT, MASTER OUTPUT and SPEAKER output are set to MONO.

Remote control



1 FUNCTION button
Use to select one of ST3 A to D input.

2 CD deck operation buttons
Use to operate the Sony CD deck.

3 MD deck operation buttons
Use to operate the Sony MD deck.

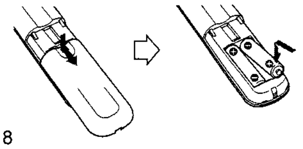
4 TAPE deck operation buttons (A, B)
Use to operate the Sony TAPE deck.

5 MASTER VOLUME operation knob
Use to adjust the master volume level.

6 MUTING button
Use to mute the output signal from MASTER OUTPUT, MASTER INSERT, ECHO SEND, MIC GROUP OUTPUT or SPEAKER output terminals.

Inserting batteries into the remote

You can control this unit with using the supplied remote. Insert two R6 (size AA) batteries by matching the + and – on the batteries. When using the remote, point it at the remote sensor on the equipment.



When to replace batteries
With normal use, the batteries should last for about six months. When the remote no longer operates the equipment, replace all the batteries with new ones.

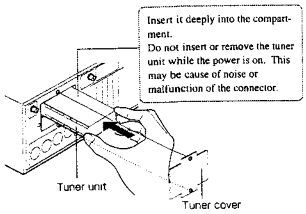
Notes
- Do not leave the remote near an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you don't use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Installation of The Tuner Unit

1 **Turn off the power of this unit.**

2 **Remove the tuner cover.**

3 **Check the up and down sides of the tuner unit, and insert it into the slot.**
The upper slot corresponds to MIC1 and the lower slot to MIC2. (Set the group and channel of the tuner unit to same as wireless microphone's one.)



Insert it deeply into the compartment.
Do not insert or remove the tuner unit while the power is on. This may be cause of noise or malfunction of the connector.

4 **Fix the tuner cover.**
After installation of the tuner unit, turn on the power of the unit and turn on the power of the wireless microphone to check it is receiving. While receiving, the RF/SIGNAL indicator lights up. Note that the RF/SIGNAL indicator will not light up when the setting channel of the microphone is different from the setting of the tuner unit, or when the microphone power is consumed.

NOTICE
To prevent breakdown or injury, do not put your hand inside of the slot except when you install or remove the tuner unit.

Troubleshooting

Power will not turned on.	• Is the power cord unplugged? • Is the curcuit breaker working? (See page 7.)
No sound.	• Does the EMG indicator turn off? (See pages 4 and 7.) • Does the PROTECTION indicator turn off? (See page 4.)
No sound is output to MASTER OUTPUT or SPEAKER terminals from microphone.	• Has the ASSIGN switch been set to OFF? (See page 8.) • Has the MIC GROUP knob been set to –∞? (See page 5.)
No sound from wireless microphone.	• Is the channels of microphone and tuner unit matching? And does the RF/SIGNAL indicator light on when the microphone is turned on? (See page 9.) • Is the antenna connected correctly?
Sound is heard in monaural.	Has the MODE switch been set to STEREO? (See page 8.)
Sound is distorted.	Is the CLIP indicator lighting on? (See page 4.)
No sound from MIC4.	Has another microphone been connected to MIC4 terminal on the front panel?(See page 4.)
Wireless remote control does not function.	• Has a plug been connected to CONTROL-S input terminal on the rear panel?(See page 6.) • Are the remote control batteries dead?(See page 8.)
Signal of the ST2 can not be recorded.	Signal from ST2 does not output to REC OUTPUT. (See page 5.)

Printed in Japan

SECTION 2
ELECTRICAL ADJUSTMENT

1. バイアス調整

準備：

マスター VOL　：MIN
RV601 (602)　：MIN

方法：

1. 無信号で CN601 (605) にテスターを接続する。
2. 電圧が規格を満たすよう RV601 (602) を調整する。
   (下図参照)
   V = 5mV ± 0.5mV

2. DCオフセット確認

方法：

スピーカー端子 (+), (–) 間の電圧が規格を満たしていることを確認する。
V = 0 ± 30mV

1. Bias Adjustment

Preparation:

Master VOL　: MIN
RV601 (602)　: MIN

Procedure:

1. Connect a multimeter to the CN601 (605) without a signal.
2. Adjust the RV601 (602) so that a multimeter indicates:
   (See the following diagram.)
   V = 5mV ± 0.5mV

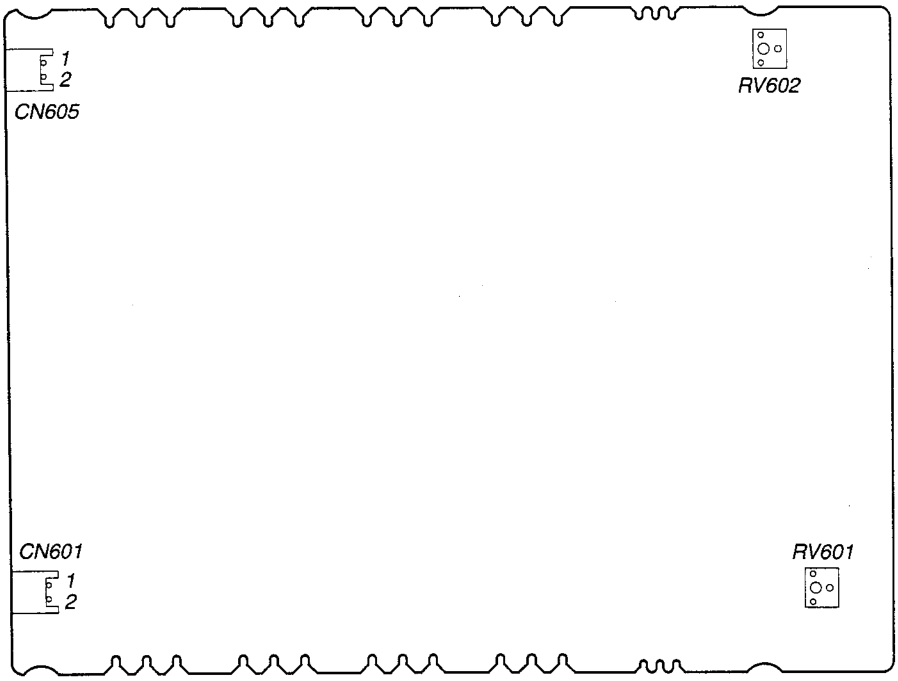
2. DC Offset Confirmation

Procedure:

Confirm that the voltage between "+" and "–" output terminals of speaker is below.
V = 0 ± 30mV

Adjustment Location:

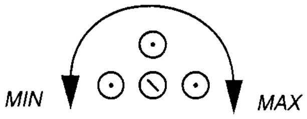
[PA BOARD]



CN601 (605)

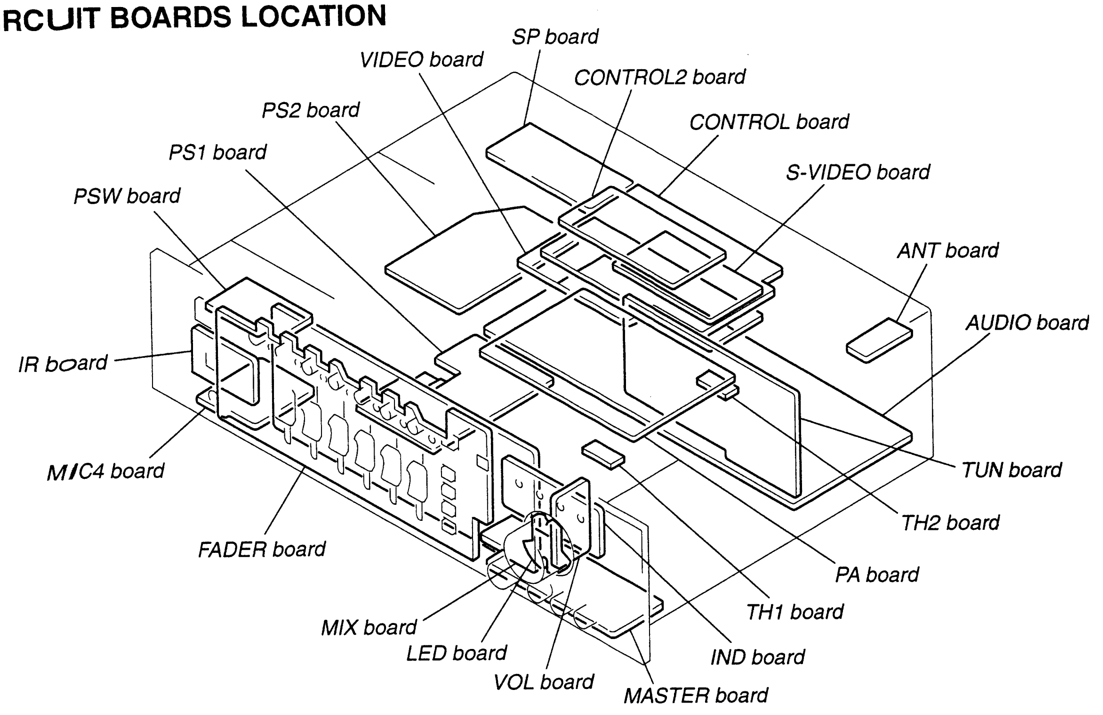
端子 Terminals	極性 Polarity
1	+
2	–

RV601 (602)



SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION


VIDEO board
SP board
CONTROL2 board
PS2 board
CONTROL board
PS1 board
S-VIDEO board
PSW board
ANT board
AUDIO board
IR board
MIC4 board
TUN board
TH2 board
FADER board
PA board
TH1 board
MIX board
IND board
LED board
VOL board
MASTER board

プリント図，回路図用共通ノート

回路図ノート

- ケミコン，タンタルを除くコンデンサで，耐圧50V以下のものは，その耐圧を省略。単位はすべてμF（pはpF）。
- 抵抗で指示のないものは，1／4W以下を示す。
  単位はすべてΩ。
- △ ：内蔵部品。
- ▭ ：パネル表示名称。
- B+ ：B＋ライン。
- B− ：B－ライン。

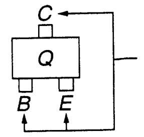
⚠印の部品，または⚠印付の点線で囲まれた部品は，
安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

- ▭ ：調整名称。
- 電圧は，対アース間を無信号状態で測定。
- 電圧値は，テスタ（入力インピーダンス10MΩ／V）で測定した参考値。
- 信号の流れについて
  ⇨ ：AUDIO
  ➡ ：VIDEO
- 電圧測定条件

MASTER VOL	MIN	MONO/STE MODE	STEREO
MIC GROUP	MAX	+48V SW	OFF
ECHO SEND	−∞	BALANCE/TONE	MIDDLE
SELECT	A	FADER	−∞
MIC ASSIGN	ON		

プリント図ノート

- ○—— ：部品面側取付のリード線。
- ▬ ：見ている側のパターン
  （他のパターンについては表示されません）
- トランジスタの表記



これらは省略しています。

THIS NOTE IS COMMON FOR WIRING BOARDS AND SCHEMATIC DIAGRAMS

For schematic diagrams

- All capacitors are in μF unless otherwise noted. pF : μμF. 50V or less are not indicated except for electrolytics and tantalums.
- All resistors except chips are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation
- B+ : B+ Line
- B− : B– Line

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

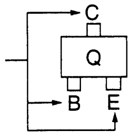
- ▭ : adjustment for repair.
- Voltage is measured with respect to ground under no-signal conditions.
- Voltages are reference values measured by a VOM (10MΩ/V).
- Signal path.
  ⇨ : AUDIO
  ➡ : VIDEO
- Conditions of measuring voltage

MASTER VOL	MIN	MONO/STE MODE	STEREO
MIC GROUP	MAX	+48V SW	OFF
ECHO SEND	−∞	BALANCE/TONE	MIDDLE
SELECT	A	FADER	−∞
MIC ASSIGN	ON		

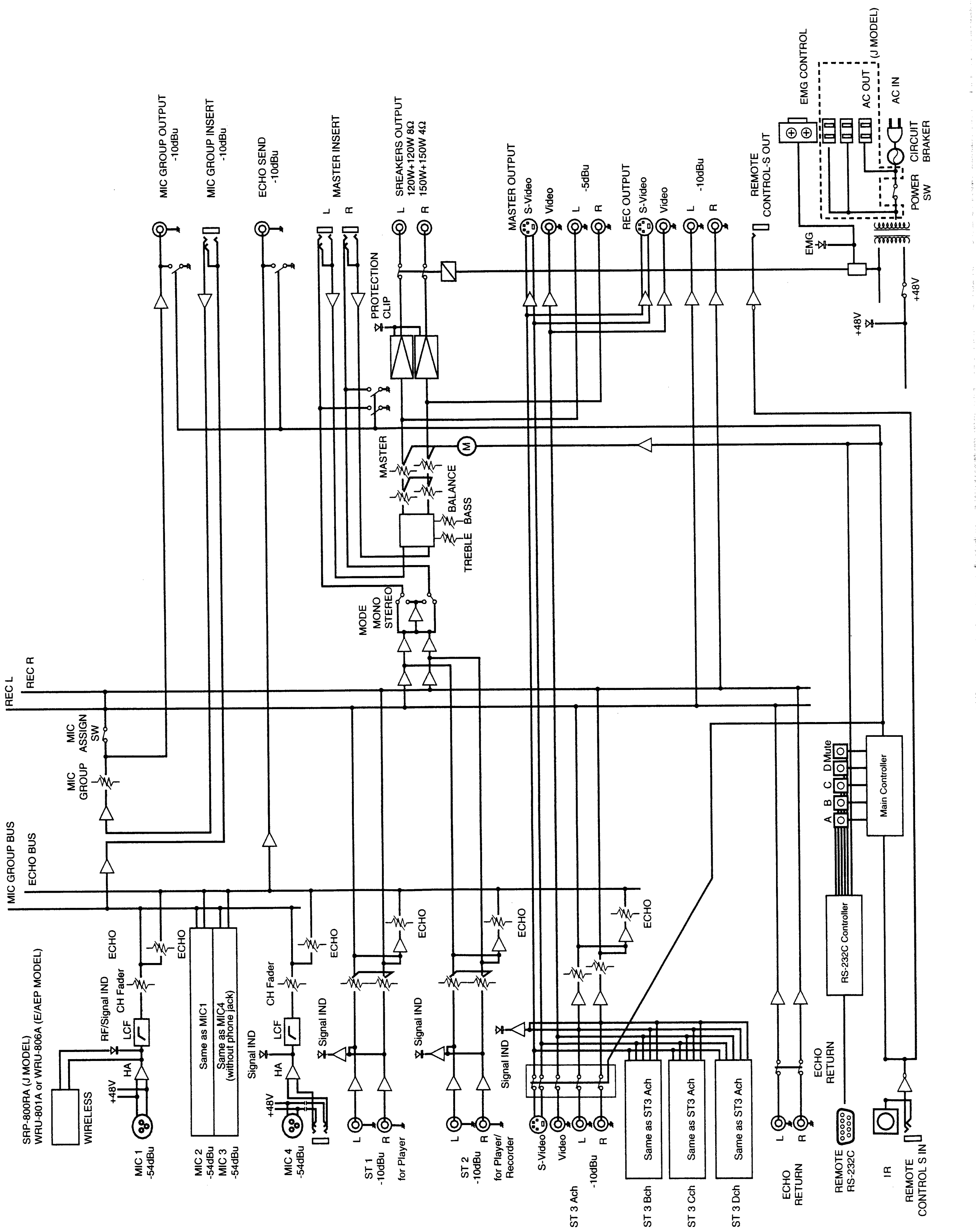
For printed wiring boards

- ○—— : parts extracted from the component side.
- ▬ : Pattern on the side which is seen.
  (Other patterns are not shown.)
- Indication of transistor.

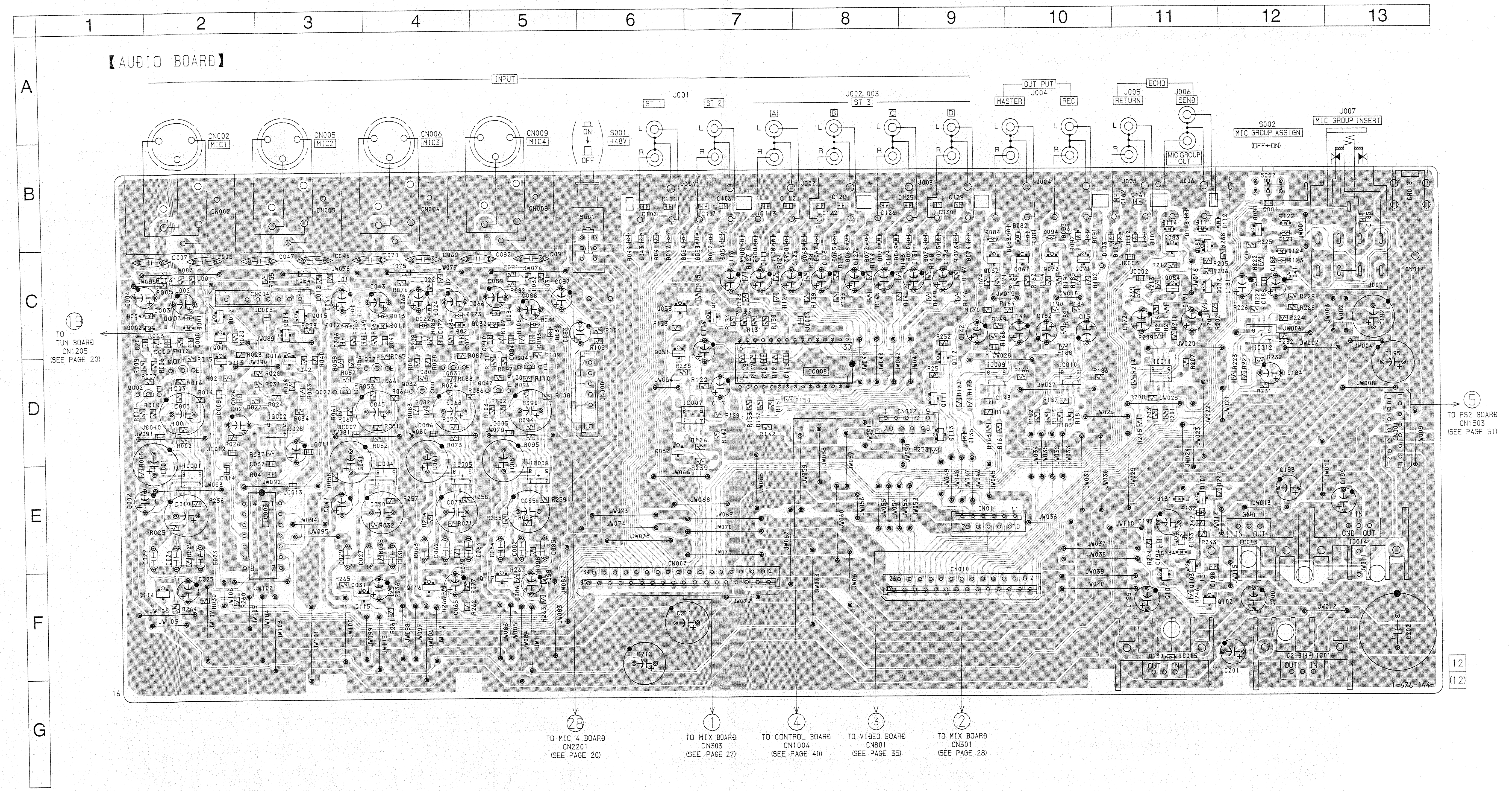
These are omitted.



3-2. BLOCK DIAGRAM


MIC GROUP OUTPUT -10dBu
MIC GROUP INSERT -10dBu
ECHO SEND -10dBu
MASTER INSERT
L
R
SREAKERS OUTPUT 120W+120W 8Ω 150W+150W 4Ω
PROTECTION CLIP
MASTER OUTPUT
S-Video
Video
-5dBu
REC OUTPUT
-10dBu
REMOTE CONTROL-S OUT
EMG CONTROL
AC OUT
(J MODEL)
AC IN
CIRCUIT BRAKER
POWER SW
EMG
+48V
MASTER
BALANCE
BASS
TREBLE
M
MODE MONO STEREO
REC L
REC R
MIC ASSIGN SW
MIC GROUP
MIC GROUP BUS
ECHO BUS
A B C D Mute
Main Controller
RS-232C Controller
ECHO
RF/Signal IND
CH Fader
LCF
HA
Signal IND
SRP-800RA (J MODEL) WRU-801A or WRU-806A (E/AEP MODEL)
WIRELESS
MIC 1 -54dBu
Same as MIC1
Same as MIC4 (without phone jack)
MIC 2 -54dBu
MIC 3 -54dBu
MIC 4 -54dBu
ST 1 -10dBu
for Player
ST 2 -10dBu
for Player/ Recorder
ST 3 Ach
Same as ST3 Ach
ST 3 Bch
ST 3 Cch
ST 3 Dch
ECHO RETURN
REMOTE RS-232C
IR
REMOTE CONTROL S IN

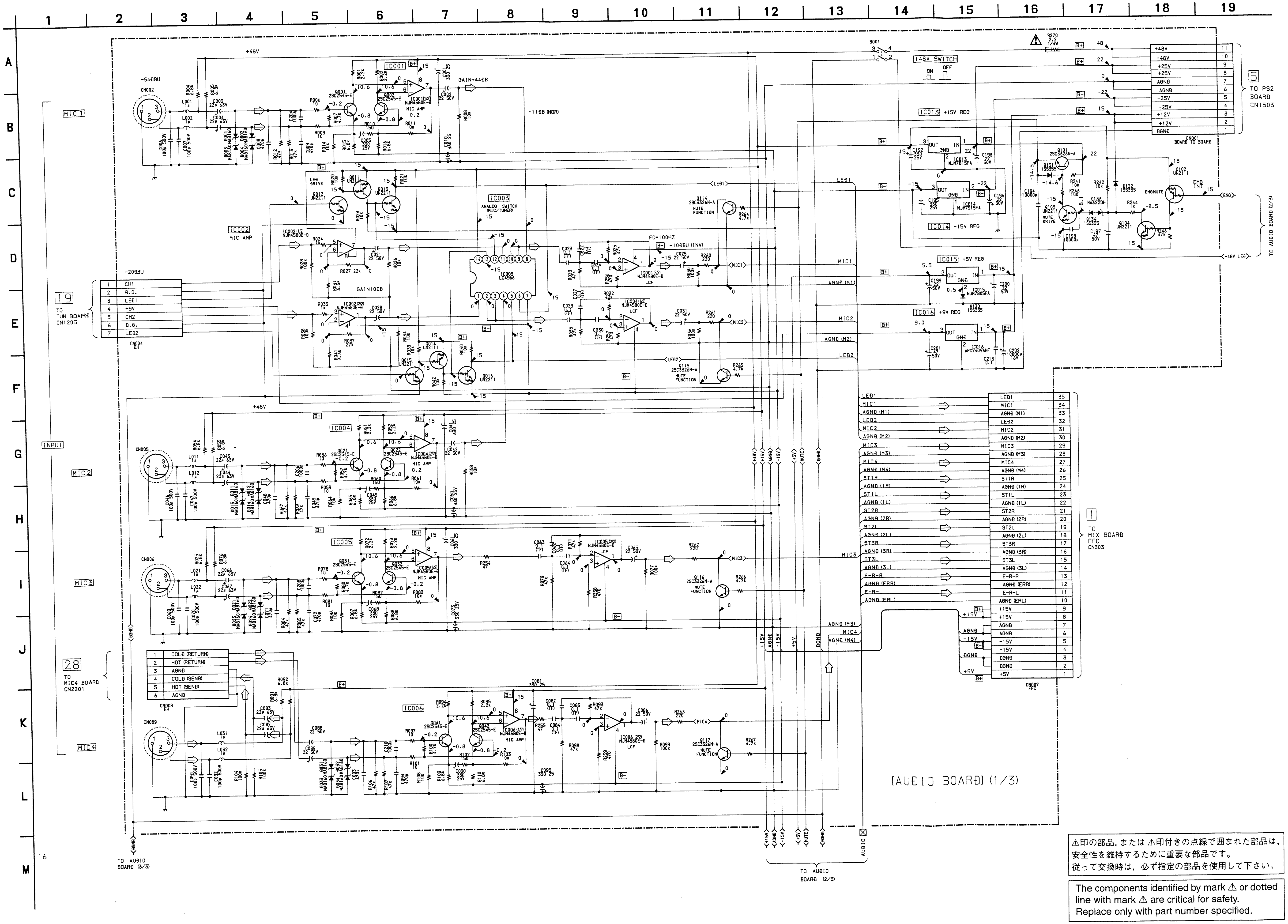
3-3. PRINTED WIRING BOARD – AUDIO SECTION –


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
【AUDIO BOARD】
INPUT
CN002 MIC1
CN005 MIC2
CN006 MIC3
CN009 MIC4
ON OFF
S001 +48V
J001 ST 1 ST 2
J002, 003 ST 3
A
B
C
D
OUT PUT
J004
MASTER
REC
ECHO
J005 RETURN
J006 SEND
MIC GROUP OUT
S002 MIC GROUP ASSIGN (OFF↔ON)
J007 MIC GROUP INSERT
L
R
IC001
IC002
IC003
IC004
IC005
IC006
IC007
IC008
IC009
IC010
IC011
IC012
IC013
IC014
IC015
IC016
CN007
CN008
CN010
CN011
CN012
CN013
CN014
⑲ TO TUN BOARD CN1205 (SEE PAGE 20)
⑤ TO PS2 BOARD CN1503 (SEE PAGE 51)
㉘ TO MIC 4 BOARD CN2201 (SEE PAGE 20)
① TO MIX BOARD CN303 (SEE PAGE 27)
④ TO CONTROL BOARD CN1004 (SEE PAGE 40)
③ TO VIDEO BOARD CN801 (SEE PAGE 35)
② TO MIX BOARD CN301 (SEE PAGE 28)
1-676-144-
12 (12)

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D001	C-2	D041	B-6	D069	B-8	D101	B-11	D134	E-11	IC014	E-13	Q041	D-5	Q102	F-11
D002	C-1	D042	B-6	D070	B-9	D102	B-11	D135	D-9	IC015	F-12	Q042	D-5	Q103	F-11
D003	C-2	D043	B-6	D071	B-8	D103	B-10			IC016	F-13	Q051	C-6	Q104	F-11
D004	C-1	D044	B-6	D072	B-8	D104	B-11	IC001	E-2			Q052	D-6	Q111	D-9
D011	C-4	D051	B-7	D073	B-9	D111	B-11	IC002	D-3	Q001	D-2	Q053	C-6	Q112	D-9
D012	C-3	D052	B-7	D074	B-9	D112	B-11	IC003	E-2	Q002	D-1	Q054	C-7	Q113	D-9
D013	C-4	D053	B-7	D075	B-9	D113	B-11	IC004	E-4	Q011	C-2	Q061	C-10	Q114	F-1
D014	C-3	D054	B-6	D076	B-9	D114	B-11	IC005	E-4	Q012	C-2	Q062	C-9	Q115	F-3
D021	C-4	D061	B-7	D081	B-10	D121	B-12	IC006	E-5	Q013	D-2	Q071	C-10	Q116	F-4
D022	C-4	D062	B-7	D082	B-10	D122	B-12	IC007	D-6	Q014	C-3	Q072	C-10	Q117	F-5
D023	C-4	D063	B-7	D083	B-9	D123	C-12	IC008	D-8	Q015	C-3	Q081	B-11		
D024	C-4	D064	B-7	D084	B-9	D124	C-12	IC009	D-9	Q016	D-3	Q082	C-11		
D031	C-5	D065	B-8	D091	B-10	D130	F-11	IC010	D-10	Q021	D-4	Q083	B-11		
D032	C-5	D066	B-8	D092	B-10	D131	E-11	IC011	D-11	Q022	D-3	Q084	C-11		
D033	C-5	D067	B-8	D093	B-10	D132	E-11	IC012	C-12	Q031	D-4	Q091	B-12		
D034	C-5	D068	B-8	D094	B-10	D133	E-11	IC013	E-12	Q032	D-4	Q101	E-11		

3-4. SCHE MATIC DIAGRAM – AUDIO SECTION (1/3) –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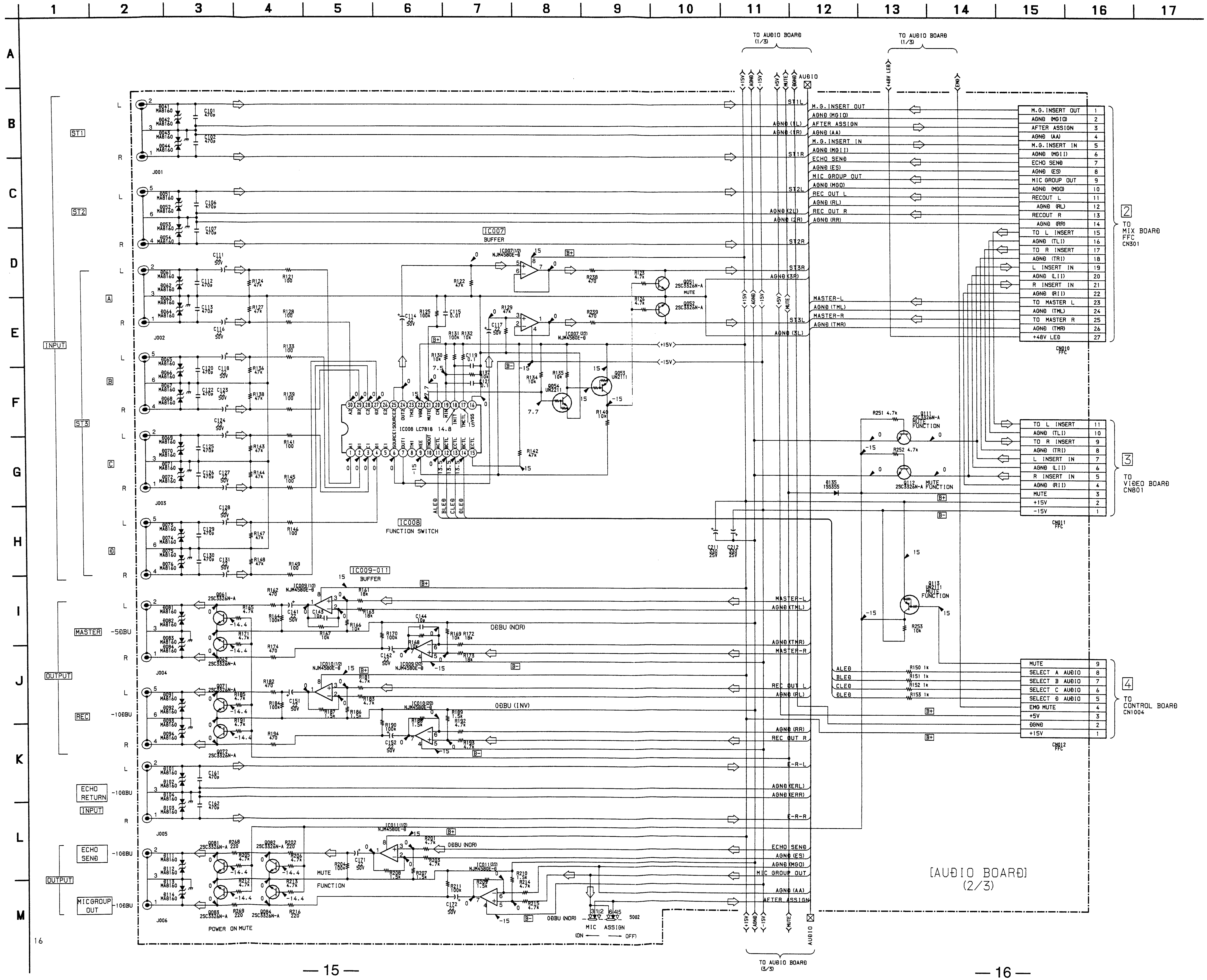
18
19
A
B
C
D
E
F
G
H
I
J
K
L
M
+48V
-54dBu
CN002
MIC1
MIC2
MIC3
MIC4
INPUT
IC001
IC002
IC003
IC004
IC005
IC006
IC013
IC014
IC015
IC016
MIC AMP
GAIN+44dB
-110dB (NOR)
GAIN10dB
ANALOG SWITCH MIC/TUNER
LED DRIVE
MUTE FUNCTION
LCF
FC=100HZ
-100dBu (INV)
-20dBu
19
TO TUN BOARD CN1205
CH1
G.G.
LED1
+9V
CH2
G.G.
LED2
CN004
28
TO MIC4 BOARD CN2201
COLD (RETURN)
HOT (RETURN)
AGND
COLD (SEND)
HOT (SEND)
AGND
CN008
CN009
S001
+48V SWITCH
ON
OFF
+15V REG
-15V REG
+5V REG
+9V REG
5
TO PS2 BOARD CN1503
+48V
+48V
+25V
+25V
AGND
AGND
-25V
-25V
+12V
+12V
DGND
CN001
EMGMUTE
EMG INT
TO AUDIO BOARD (2/3)
1
TO MIX BOARD FFC CN303
LED1
MIC1
AGND (M1)
LED2
MIC2
AGND (M2)
MIC3
AGND (M3)
MIC4
AGND (M4)
ST1R
AGND (1R)
ST1L
AGND (1L)
ST2R
AGND (2R)
ST2L
AGND (2L)
ST3R
AGND (3R)
ST3L
AGND (3L)
E-R-R
AGND (ERR)
E-R-L
AGND (ERL)
+15V
+15V
AGND
AGND
-15V
-15V
DGND
DGND
+5V
CN007 FFC
[AUDIO BOARD] (1/3)
TO AUDIO BOARD (3/3)
TO AUDIO BOARD (2/3)
16

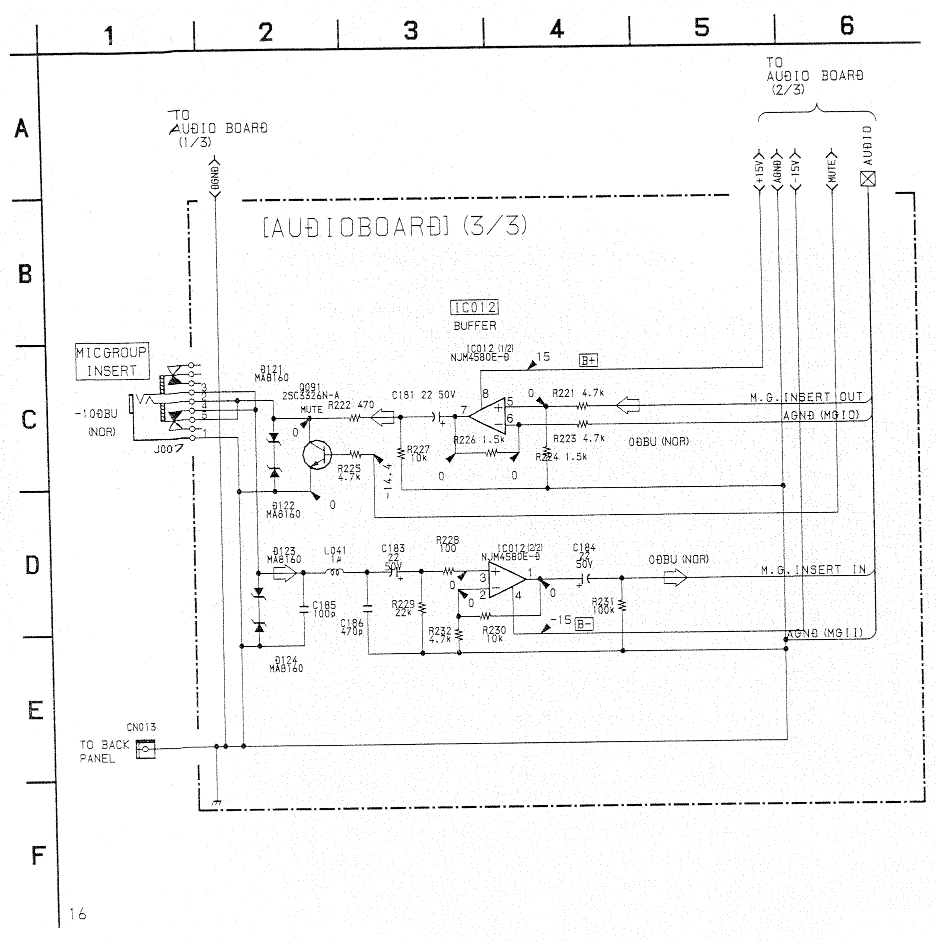
⚠印の部品、または⚠印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。
従って交換時は、必ず指定の部品を使用して下さい。

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

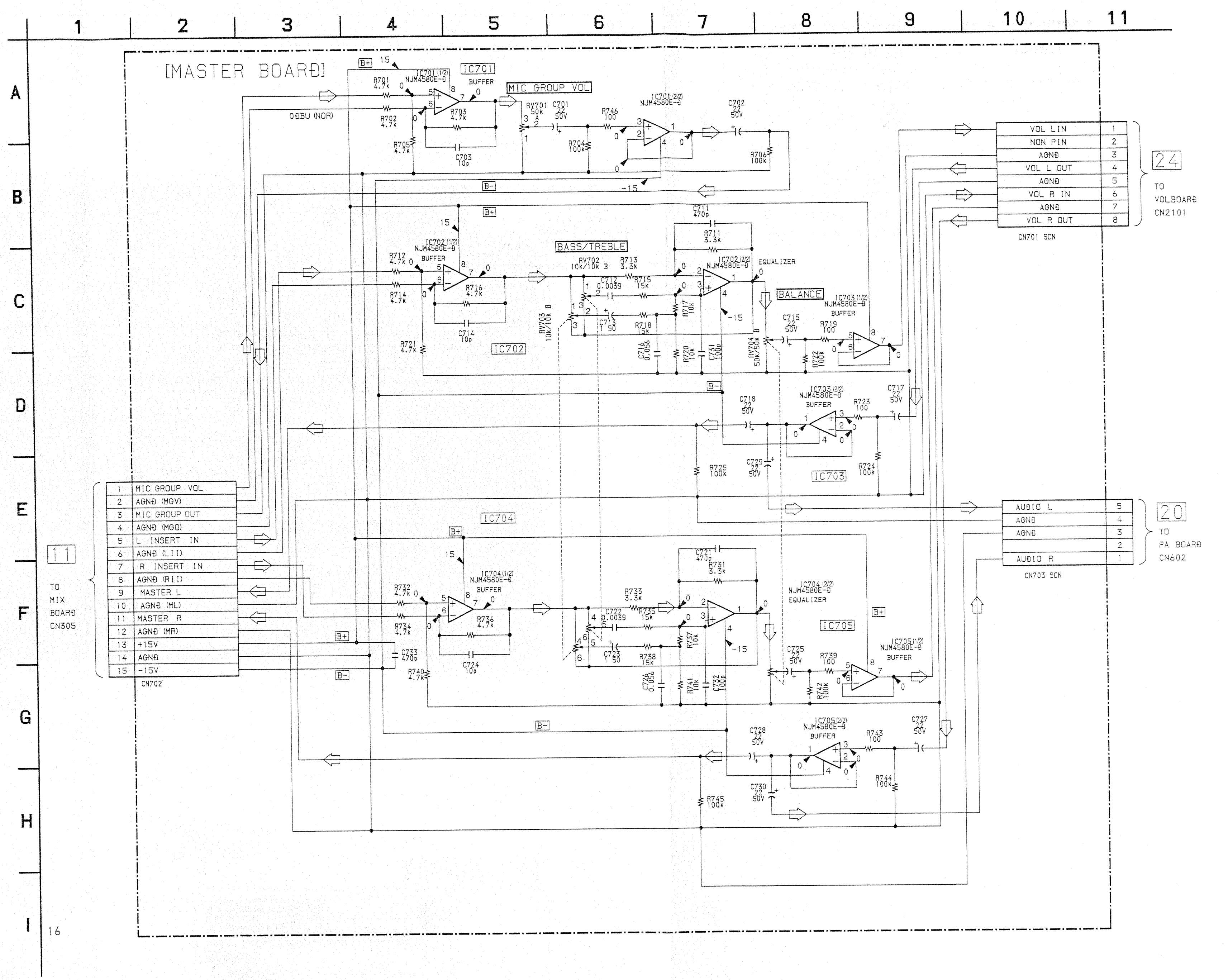
3-5. SCHEMATIC DIAGRAM – AUDIO SECTION (2/3) –


TO AUDIO BOARD (1/3)
TO AUDIO BOARD (3/3)
INPUT
ST1
ST2
ST3
A
B
C
D
OUTPUT
MASTER -50BU
REC -10BU
ECHO RETURN INPUT -10BU
ECHO SEND -10BU
MICGROUP OUT -10BU
J001
J002
J003
J004
J005
J006
IC007 BUFFER
IC008 FUNCTION SWITCH
IC008 LC7818
IC009-011 BUFFER
0DBU (NOR)
0DBU (INV)
MUTE FUNCTION
POWER ON MUTE
MIC ASSIGN (ON ← → OFF)
S002
M.G.INSERT OUT
AGND (MGIO)
AFTER ASSIGN
AGND (AA)
M.G.INSERT IN
AGND (MGII)
ECHO SEND
AGND (ES)
MIC GROUP OUT
AGND (MGO)
RECOUT L
AGND (RL)
RECOUT R
AGND (RR)
TO L INSERT
AGND (TLI)
TO R INSERT
AGND (TRI)
L INSERT IN
AGND (LII)
R INSERT IN
AGND (RII)
TO MASTER L
AGND (TML)
TO MASTER R
AGND (TMR)
+48V LED
CN010 FFC
2 TO MIX BOARD FFC CN301
MUTE
+15V
-15V
CN011 FFC
3 TO VIDEO BOARD CN801
SELECT A AUDIO
SELECT B AUDIO
SELECT C AUDIO
SELECT D AUDIO
EMG MUTE
+5V
DGND
CN012 FFC
4 TO CONTROL BOARD CN1004
ALED
BLED
CLED
DLED
[AUDIO BOARD] (2/3)

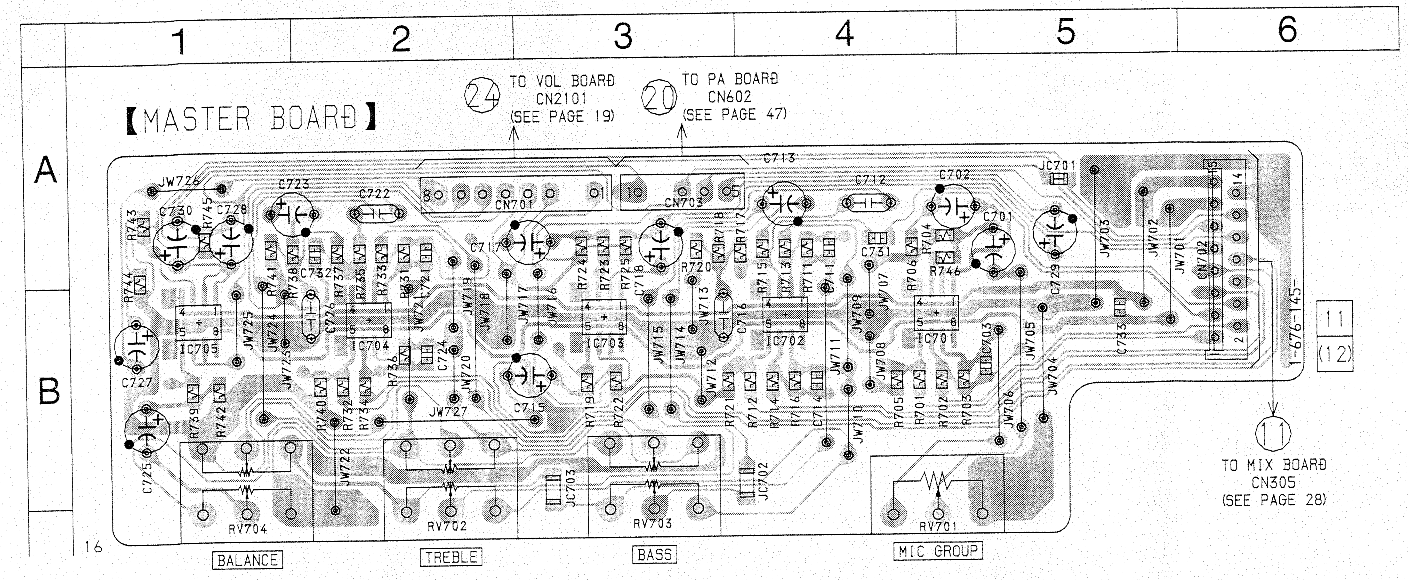
3-6. SCHEMATIC DIAGRAM – AUDIO SECTION (3/3) –


[AUDIO BOARD] (3/3)
TO AUDIO BOARD (1/3)
TO AUDIO BOARD (2/3)
MICGROUP INSERT
J007
IC012 BUFFER
NJM4580E-B
2SC3326N-A MUTE
M.G. INSERT OUT
AGND (MGIO)
M.G. INSERT IN
AGND (MGII)
0dBU (NOR)
CN013
TO BACK PANEL

3-8. SCHEMATIC DIAGRAM – MASTER SECTION –


[MASTER BOARD]
IC701
MIC GROUP VOL
IC702
BASS/TREBLE
EQUALIZER
BALANCE
IC703
IC704
IC705
BUFFER
NJM4580E-B
CN701 SCN
VOL L IN
NON PIN
AGND
VOL L OUT
AGND
VOL R IN
AGND
VOL R OUT
24
TO VOL BOARD CN2101
CN702
MIC GROUP VOL
AGND (MGV)
MIC GROUP OUT
AGND (MGO)
L INSERT IN
AGND (LII)
R INSERT IN
AGND (RII)
MASTER L
AGND (ML)
MASTER R
AGND (MR)
+15V
AGND
-15V
11
TO MIX BOARD CN305
CN703 SCN
AUDIO L
AGND
AGND
AUDIO R
20
TO PA BOARD CN602

3-7. PRINTED WIRING BOARD – MASTER SECTION –


【MASTER BOARD】
24 TO VOL BOARD CN2101 (SEE PAGE 19)
20 TO PA BOARD CN602 (SEE PAGE 47)
11 TO MIX BOARD CN305 (SEE PAGE 28)
1-676-145-11 (12)
IC701
IC702
IC703
IC704
IC705
RV701
RV702
RV703
RV704
BALANCE
TREBLE
BASS
MIC GROUP

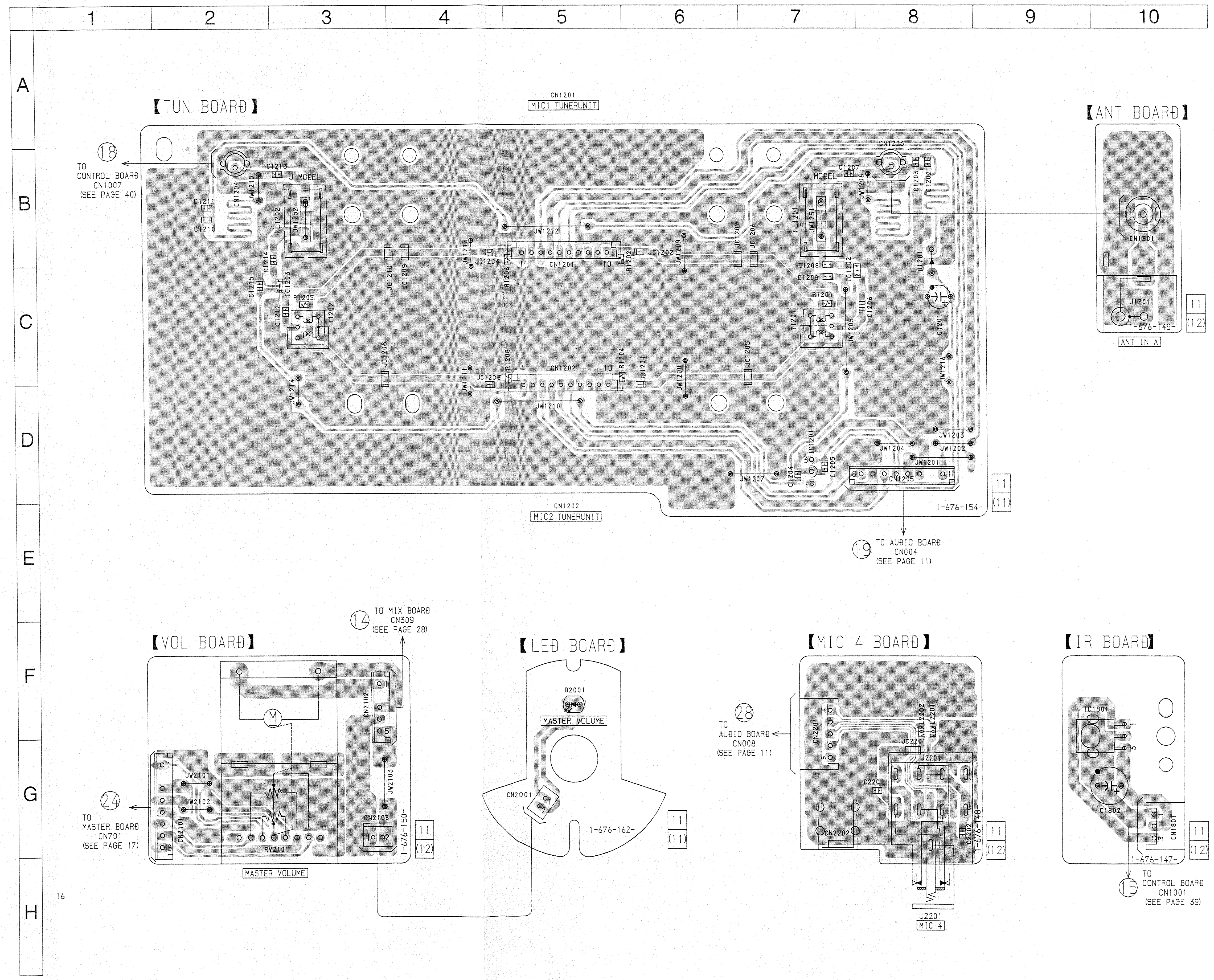
- **Semiconductor Location**

Ref. No.	Location
IC701	B-4
IC702	B-4
IC703	B-3
IC704	B-2
IC705	B-1

3-9. PRINTED WIRING BOARD – ANT, IR, LED, MIC4, TUN, VOL SECTION –

- Semiconductor Location

Ref. No.	Location
D1201	B-8
D2001	F-5
IC1201	D-7
IC1202	B-8
IC1203	C-3
IC1801	F-10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A
B
C
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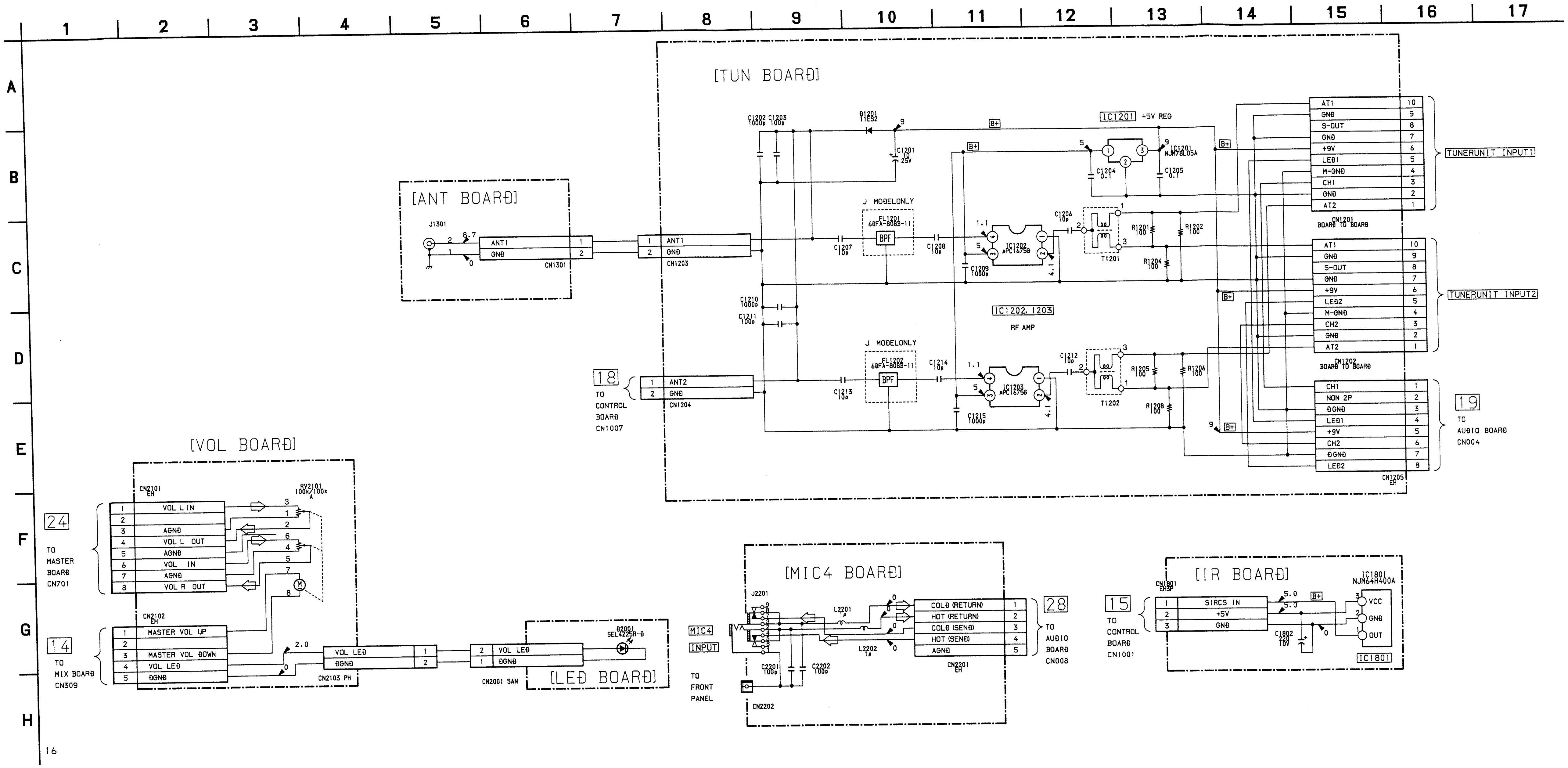
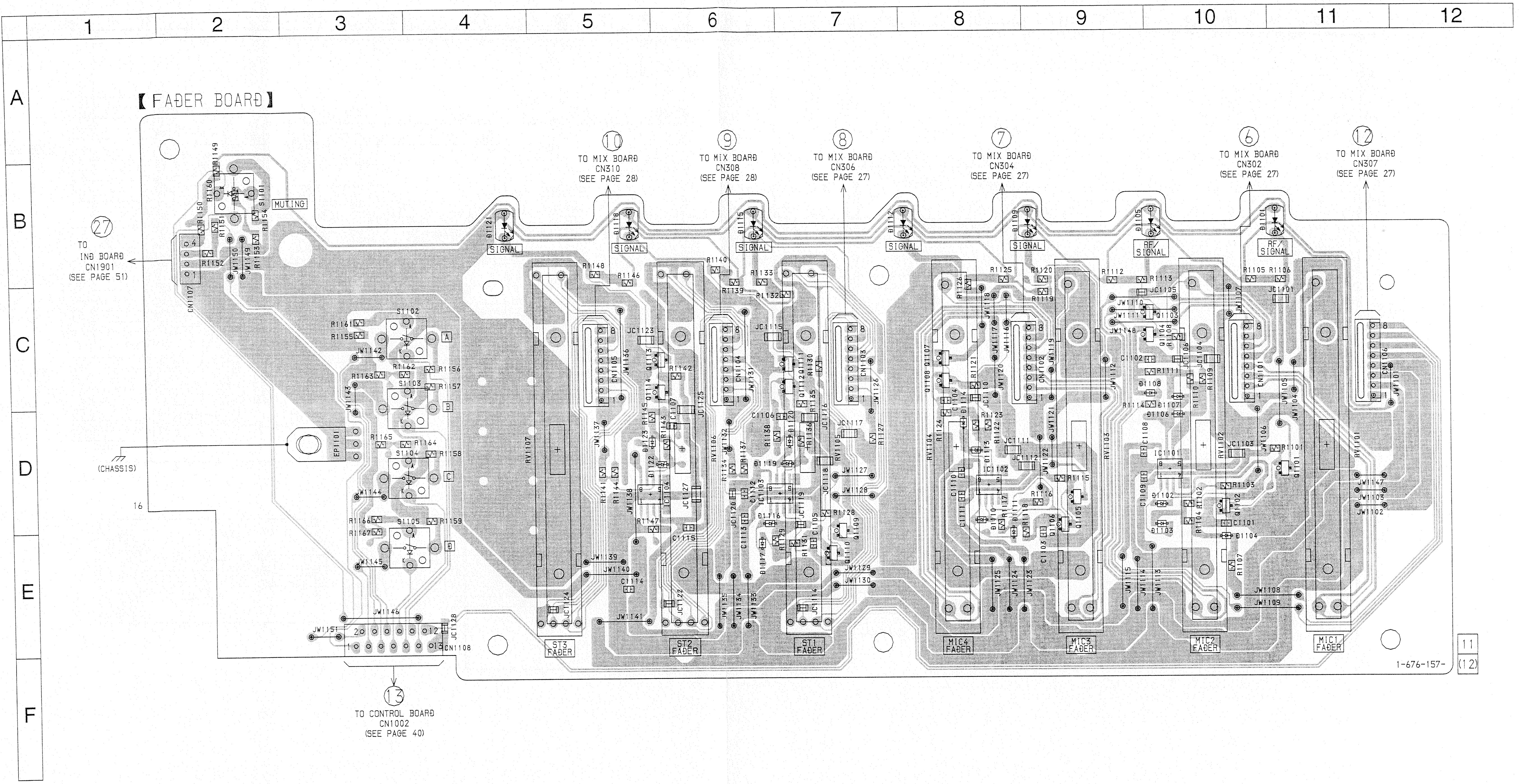
G
H
【TUN BOARD】
CN1201
MIC1 TUNERUNIT
⑱ TO CONTROL BOARD CN1007 (SEE PAGE 40)
J MODEL
CN1202
MIC2 TUNERUNIT
1-676-154-
11
(11)
⑲ TO AUDIO BOARD CN004 (SEE PAGE 11)
【ANT BOARD】
CN1301
J1301
1-676-149-
ANT IN A
11
(12)
【VOL BOARD】
⑭ TO MIX BOARD CN309 (SEE PAGE 28)
㉔ TO MASTER BOARD CN701 (SEE PAGE 17)
CN2101
CN2102
CN2103
JW2101
JW2102
JW2103
RV2101
MASTER VOLUME
1-676-150-
11
(12)
【LED BOARD】
D2001
MASTER VOLUME
CN2001
1-676-162-
11
(11)
【MIC 4 BOARD】
㉘ TO AUDIO BOARD CN008 (SEE PAGE 11)
CN2201
CN2202
C2201
J2201
MIC 4
1-676-148-
11
(12)
【IR BOARD】
IC1801
C1802
CN1801
1-676-147-
⑮ TO CONTROL BOARD CN1001 (SEE PAGE 39)
11
(12)
16

3-10. SCHEMATIC DIAGRAM – ANT, IR, LED, MIC4, TUN, VOL SECTION –


[TUN BOARD]
[ANT BOARD]
[VOL BOARD]
[LED BOARD]
[MIC4 BOARD]
[IR BOARD]
J1301
ANT1
GND
CN1301
CN1203
CN1204
ANT2
18 TO CONTROL BOARD CN1007
IC1201 +5V REG
IC1201 NJM78L05A
IC1202, 1203 RF AMP
IC1202 μPC1675G
IC1203 μPC1675G
J MODELONLY
FL1201 6BFA-8088-11
FL1202 6BFA-8088-11
BPF
D1201 1ES2
T1201
T1202
B+
AT1
GND
S-OUT
+9V
LED1
LED2
M-GND
CH1
CH2
AT2
CN1201 BOARD TO BOARD
CN1202 BOARD TO BOARD
TUNERUNIT INPUT1
TUNERUNIT INPUT2
NON 2P
DGND
CN1205 EH
19 TO AUDIO BOARD CN004
CN2101 EH
RV2101 100k/100k
VOL L IN
AGND
VOL L OUT
VOL IN
VOL R OUT
24 TO MASTER BOARD CN701
CN2102 EH
MASTER VOL UP
MASTER VOL DOWN
VOL LED
14 TO MIX BOARD CN309
CN2103 PH
CN2001 SAN
D2001 SEL4225R-D
MIC4 INPUT
TO FRONT PANEL
J2201
CN2202
L2201
L2202
C2201
C2202
COLD (RETURN)
HOT (RETURN)
COLD (SEND)
HOT (SEND)
CN2201 EH
28 TO AUDIO BOARD CN008
CN1801 EHSP
SIRCS IN
+5V
15 TO CONTROL BOARD CN1001
IC1801 NJM64H400A
VCC
OUT
C1802

3-11. PRINTED WIRING BOARD – FADER SECTION –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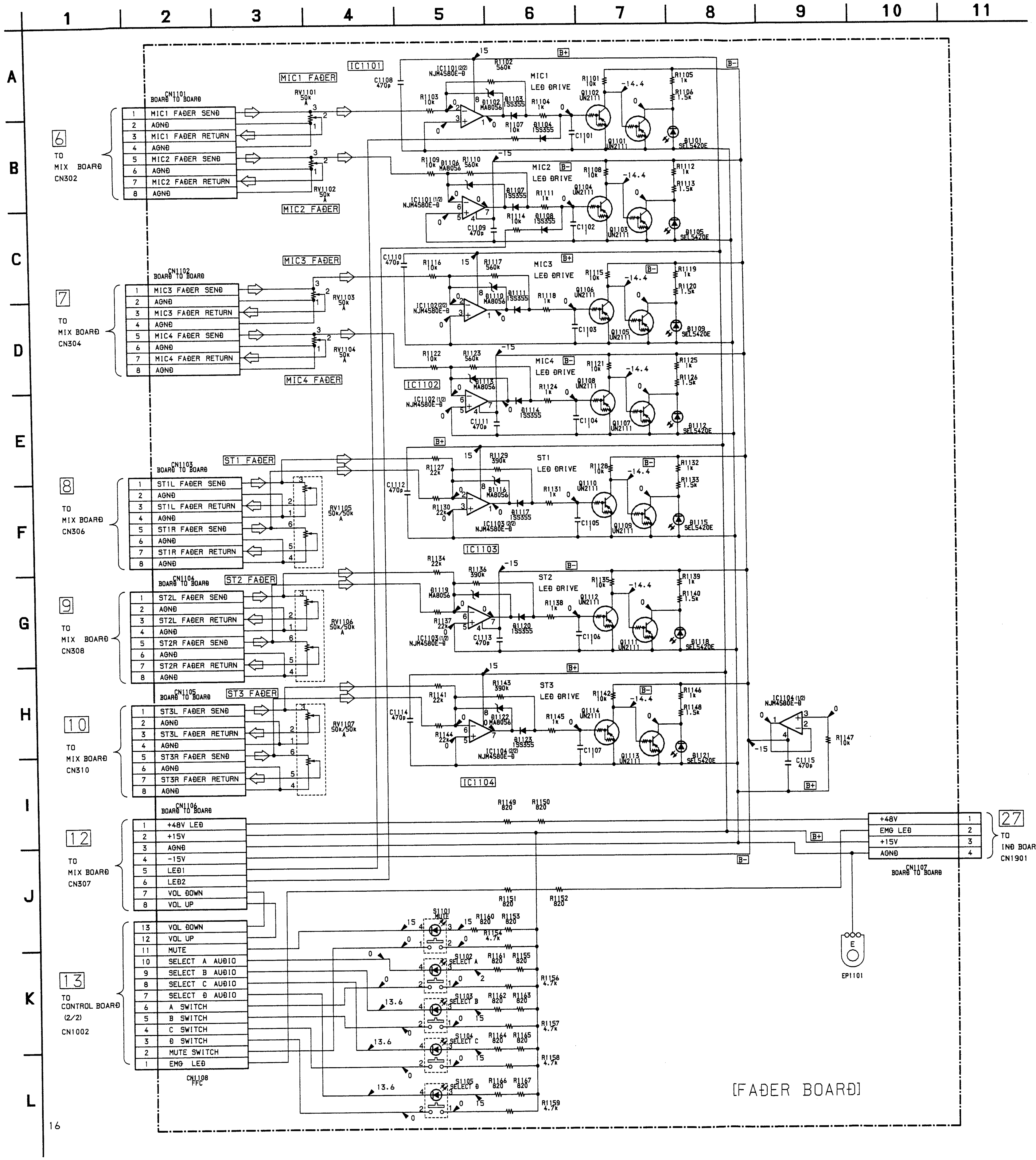
12
A
B
C
D
E
F
【FADER BOARD】
⑩ TO MIX BOARD CN310 (SEE PAGE 28)
⑨ TO MIX BOARD CN308 (SEE PAGE 28)
⑧ TO MIX BOARD CN306 (SEE PAGE 27)
⑦ TO MIX BOARD CN304 (SEE PAGE 27)
⑥ TO MIX BOARD CN302 (SEE PAGE 27)
⑫ TO MIX BOARD CN307 (SEE PAGE 27)
㉗ TO IND BOARD CN1901 (SEE PAGE 51)
⑬ TO CONTROL BOARD CN1002 (SEE PAGE 40)
(CHASSIS)
MUTING
SIGNAL
RF/SIGNAL
ST3 FADER
ST2 FADER
ST1 FADER
MIC4 FADER
MIC3 FADER
MIC2 FADER
MIC1 FADER
S1101
S1102
S1103
S1104
S1105
CN1107
CN1108
EP1101
RV1101
RV1102
RV1103
RV1104
RV1105
RV1106
RV1107
1-676-157-
11
(12)
16

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D1101	B-11	D1115	B-6	Q1101	D-11
D1102	D-10	D1116	D-6	Q1102	D-10
D1103	D-10	D1117	E-6	Q1103	C-10
D1104	E-10	D1118	B-5	Q1104	C-10
D1105	B-10	D1119	D-7	Q1105	D-9
D1106	D-10	D1120	D-7	Q1106	D-9
D1107	C-10	D1121	B-4	Q1107	C-8
D1108	C-10	D1122	D-6	Q1108	C-8
D1109	B-9	D1123	D-5	Q1109	E-7
D1110	D-8			Q1110	E-7
D1111	D-8	IC1101	D-10	Q1111	C-7
D1112	B-7	IC1102	D-8	Q1112	C-7
D1113	D-8	IC1103	D-6	Q1113	C-6
D1114	D-8	IC1104	D-5	Q1114	C-6

3-12. SCHEMATIC DIAGRAM – FADER SECTION –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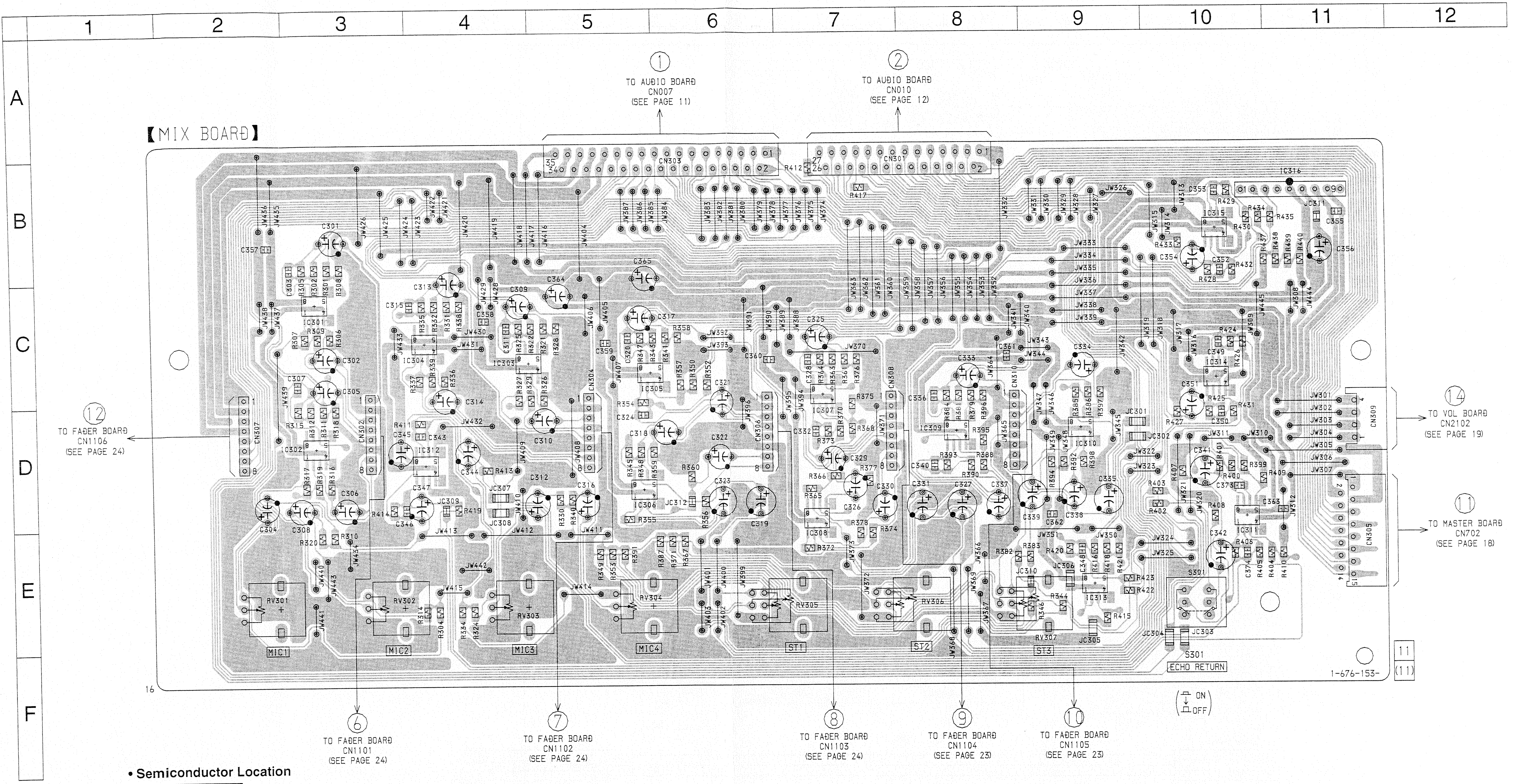
G
H
I
J
K
L
16
6 TO MIX BOARD CN302
CN1101 BOARD TO BOARD
1 MIC1 FADER SEND
2 AGND
3 MIC1 FADER RETURN
4 AGND
5 MIC2 FADER SEND
6 AGND
7 MIC2 FADER RETURN
8 AGND
MIC1 FADER
RV1101 50k A
MIC2 FADER
RV1102 50k A
IC1101
C1108 470p
IC1101(2/2) NJM4580E-B
R1102 560k
R1103 10k
D1102 MA8056
D1103 1SS355
MIC1 LED DRIVE
R1101 10k
Q1102 UN2111
-14.4
R1105 1k
R1106 1.5k
R1104 1k
R1107 10k
D1104 1SS355
C1101
Q1101 UN2111
D1101 SEL5420E
R1109 10k
D1106 MA8056
R1110 560k
-15
MIC2 LED DRIVE
R1108 10k
R1112 1k
R1113 1.5k
IC1101(1/2) NJM4580E-B
D1107 1SS355
R1111 1k
Q1104 UN2111
R1114 10k
D1108 1SS355
C1109 470p
C1102
Q1103 UN2111
D1105 SEL5420E
7 TO MIX BOARD CN304
CN1102 BOARD TO BOARD
1 MIC3 FADER SEND
2 AGND
3 MIC3 FADER RETURN
4 AGND
5 MIC4 FADER SEND
6 AGND
7 MIC4 FADER RETURN
8 AGND
MIC3 FADER
RV1103 50k A
RV1104 50k A
MIC4 FADER
C1110 470p
R1116 10k
R1117 560k
MIC3 LED DRIVE
R1115 10k
R1119 1k
R1120 1.5k
IC1102(2/2) NJM4580E-B
D1110 MA8056
D1111 1SS355
R1118 1k
Q1106 UN2111
C1103
Q1105 UN2111
D1109 SEL5420E
R1122 10k
R1123 560k
MIC4 LED DRIVE
R1121 10k
R1125 1k
R1126 1.5k
IC1102
IC1102(1/2) NJM4580E-B
D1113 MA8056
R1124 1k
Q1108 UN2111
D1114 1SS355
C1111 470p
C1104
Q1107 UN2111
D1112 SEL5420E
B+
B-
8 TO MIX BOARD CN306
CN1103 BOARD TO BOARD
ST1 FADER
1 ST1L FADER SEND
2 AGND
3 ST1L FADER RETURN
4 AGND
5 ST1R FADER SEND
6 AGND
7 ST1R FADER RETURN
8 AGND
RV1105 50k/50k A
C1112 470p
R1127 22k
R1129 390k
ST1 LED DRIVE
R1128 10k
R1132 1k
R1133 1.5k
D1116 MA8056
R1131 1k
Q1110 UN2111
R1130 22k
D1117 1SS355
IC1103(2/2) NJM4580E-B
C1105
Q1109 UN2111
D1115 SEL5420E
IC1103
9 TO MIX BOARD CN308
CN1104 BOARD TO BOARD
ST2 FADER
1 ST2L FADER SEND
2 AGND
3 ST2L FADER RETURN
4 AGND
5 ST2R FADER SEND
6 AGND
7 ST2R FADER RETURN
8 AGND
RV1106 50k/50k A
R1134 22k
R1136 390k
ST2 LED DRIVE
R1135 10k
R1139 1k
R1140 1.5k
D1119 MA8056
R1138 1k
Q1112 UN2111
R1137 22k
IC1103(1/2) NJM4580E-B
C1113 470p
D1120 1SS355
C1106
Q1111 UN2111
D1118 SEL5420E
10 TO MIX BOARD CN310
CN1105 BOARD TO BOARD
ST3 FADER
1 ST3L FADER SEND
2 AGND
3 ST3L FADER RETURN
4 AGND
5 ST3R FADER SEND
6 AGND
7 ST3R FADER RETURN
8 AGND
RV1107 50k/50k A
C1114 470p
R1141 22k
R1143 390k
ST3 LED DRIVE
R1142 10k
R1146 1k
R1148 1.5k
D1122 MA8056
R1145 1k
Q1114 UN2111
R1144 22k
D1123 1SS355
IC1104(2/2) NJM4580E-B
C1107
Q1113 UN2111
D1121 SEL5420E
IC1104
IC1104(1/2) NJM4580E-B
R1147 10k
C1115 470p
R1149 820
R1150 820
12 TO MIX BOARD CN307
CN1106 BOARD TO BOARD
1 +48V LED
2 +15V
3 AGND
4 -15V
5 LED1
6 LED2
7 VOL DOWN
8 VOL UP
27 TO IND BOARD CN1901
CN1107 BOARD TO BOARD
1 +48V
2 EMG LED
3 +15V
4 AGND
E
EP1101
13 TO CONTROL BOARD (2/2) CN1002
CN1108 FFC
13 VOL DOWN
12 VOL UP
11 MUTE
10 SELECT A AUDIO
9 SELECT B AUDIO
8 SELECT C AUDIO
7 SELECT D AUDIO
6 A SWITCH
5 B SWITCH
4 C SWITCH
3 D SWITCH
2 MUTE SWITCH
1 EMG LED
R1151 820
R1152 820
S1101 MUTE
R1160 820
R1153 820
R1154 4.7k
S1102 SELECT A
R1161 820
R1155 820
R1156 4.7k
S1103 SELECT B
R1162 820
R1163 820
R1157 4.7k
S1104 SELECT C
R1164 820
R1165 820
R1158 4.7k
S1105 SELECT D
R1166 820
R1167 820
R1159 4.7k
13.6
[FADER BOARD]

3-13. PRINTED WIRING BOARD – MIX SECTION –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12
A
B
C
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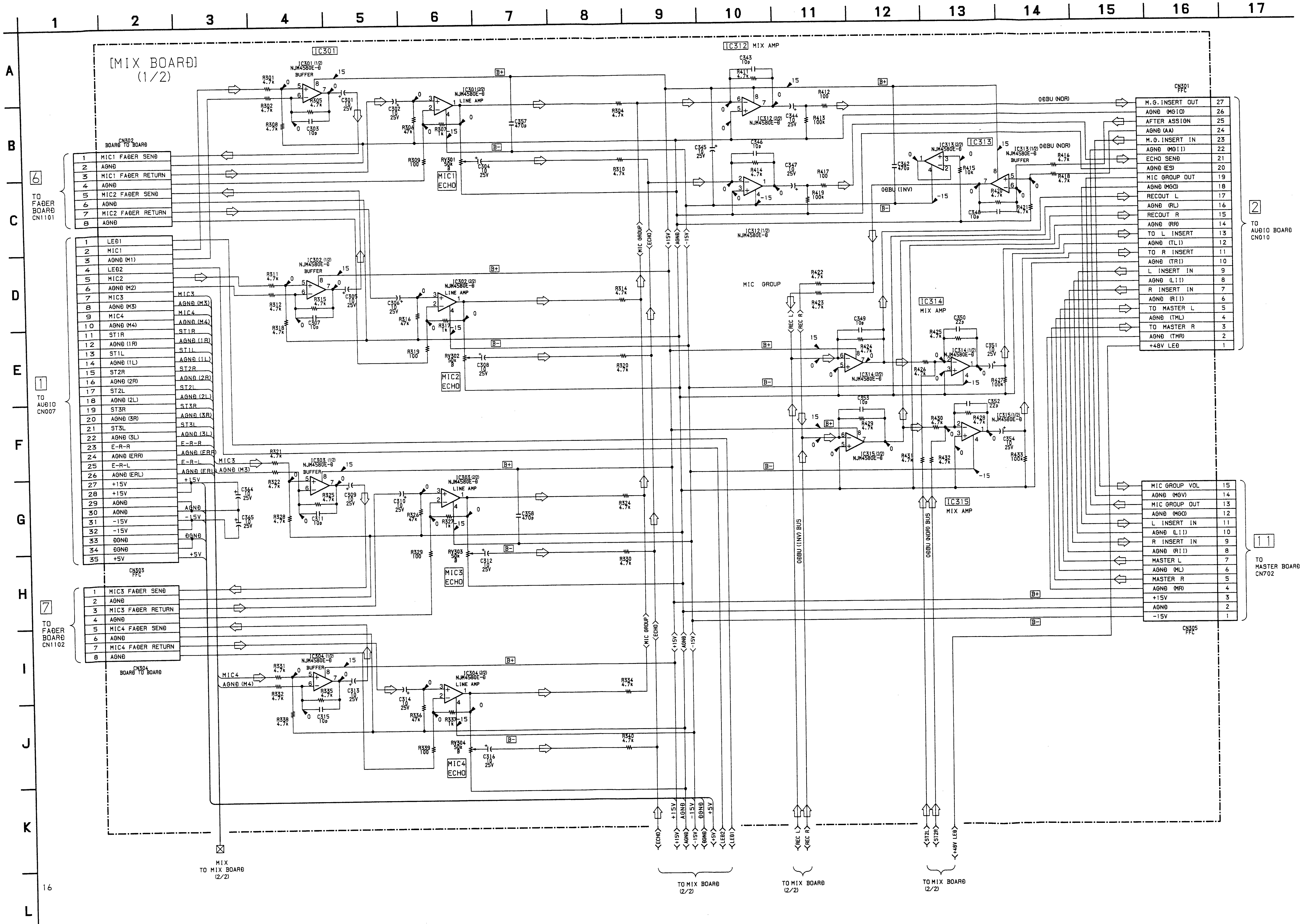
E
F
【MIX BOARD】
① TO AUDIO BOARD CN007 (SEE PAGE 11)
② TO AUDIO BOARD CN010 (SEE PAGE 12)
⑫ TO FADER BOARD CN1106 (SEE PAGE 24)
⑭ TO VOL BOARD CN2102 (SEE PAGE 19)
⑪ TO MASTER BOARD CN702 (SEE PAGE 18)
⑥ TO FADER BOARD CN1101 (SEE PAGE 24)
⑦ TO FADER BOARD CN1102 (SEE PAGE 24)
⑧ TO FADER BOARD CN1103 (SEE PAGE 24)
⑨ TO FADER BOARD CN1104 (SEE PAGE 23)
⑩ TO FADER BOARD CN1105 (SEE PAGE 23)
CN303
CN301
CN307
CN302
CN304
CN306
CN308
CN310
CN309
CN305
IC316
MIC1
MIC2
MIC3
MIC4
ST1
ST2
ST3
RV301
RV302
RV303
RV304
RV305
RV306
RV307
S301
ECHO RETURN
ON
OFF
1-676-153-
11
(11)
16

• Semiconductor Location

Ref. No.	Location
IC301	C-3
IC302	D-3
IC303	C-4
IC304	C-4
IC305	C-5
IC306	D-5
IC307	C-7
IC308	D-7
IC309	D-8
IC310	D-9
IC311	D-10
IC312	D-4
IC313	E-9
IC314	C-10
IC315	B-10
IC316	B-11

3-14. SCHEMATIC DIAGRAM – MIX SECTION (1/2) –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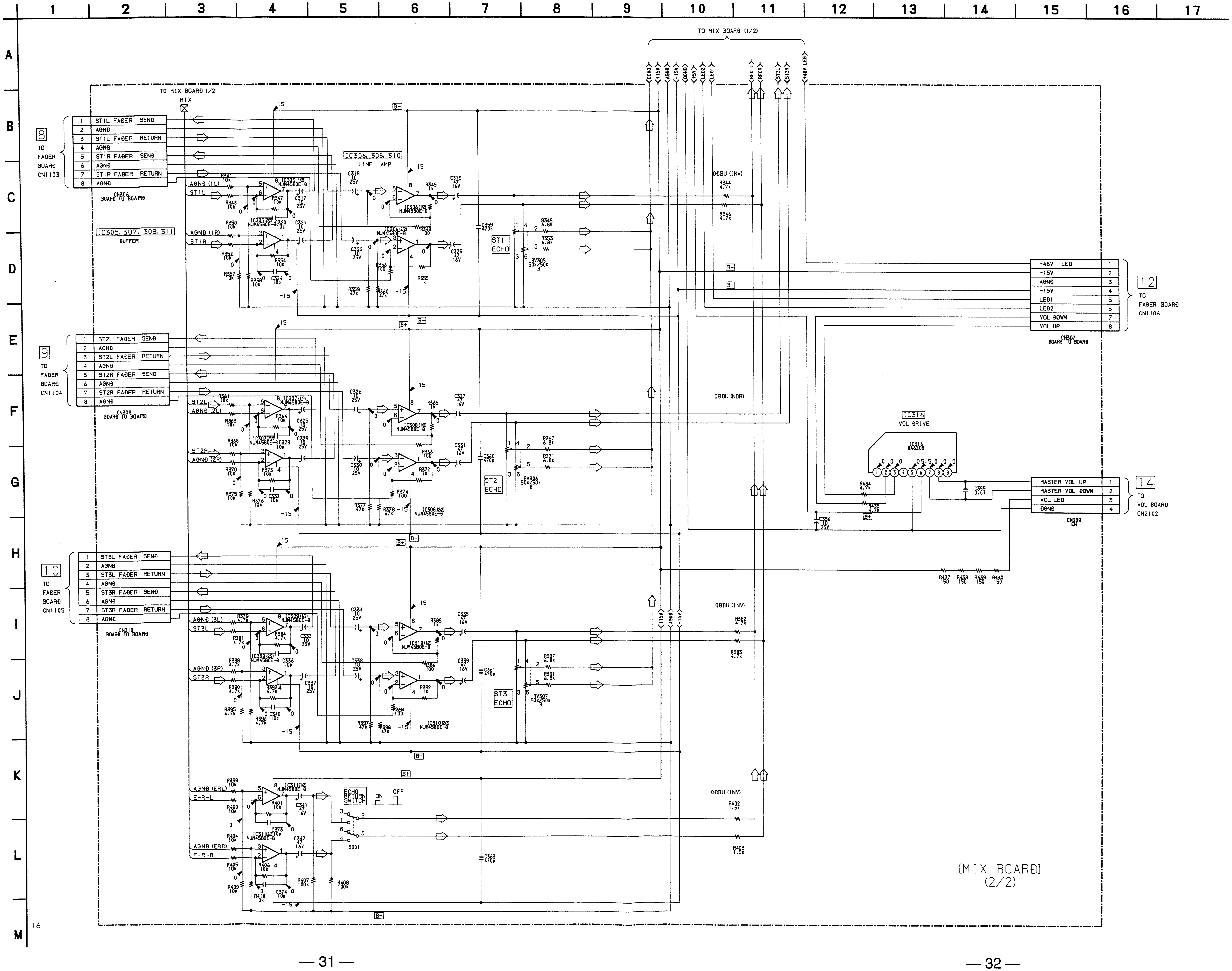
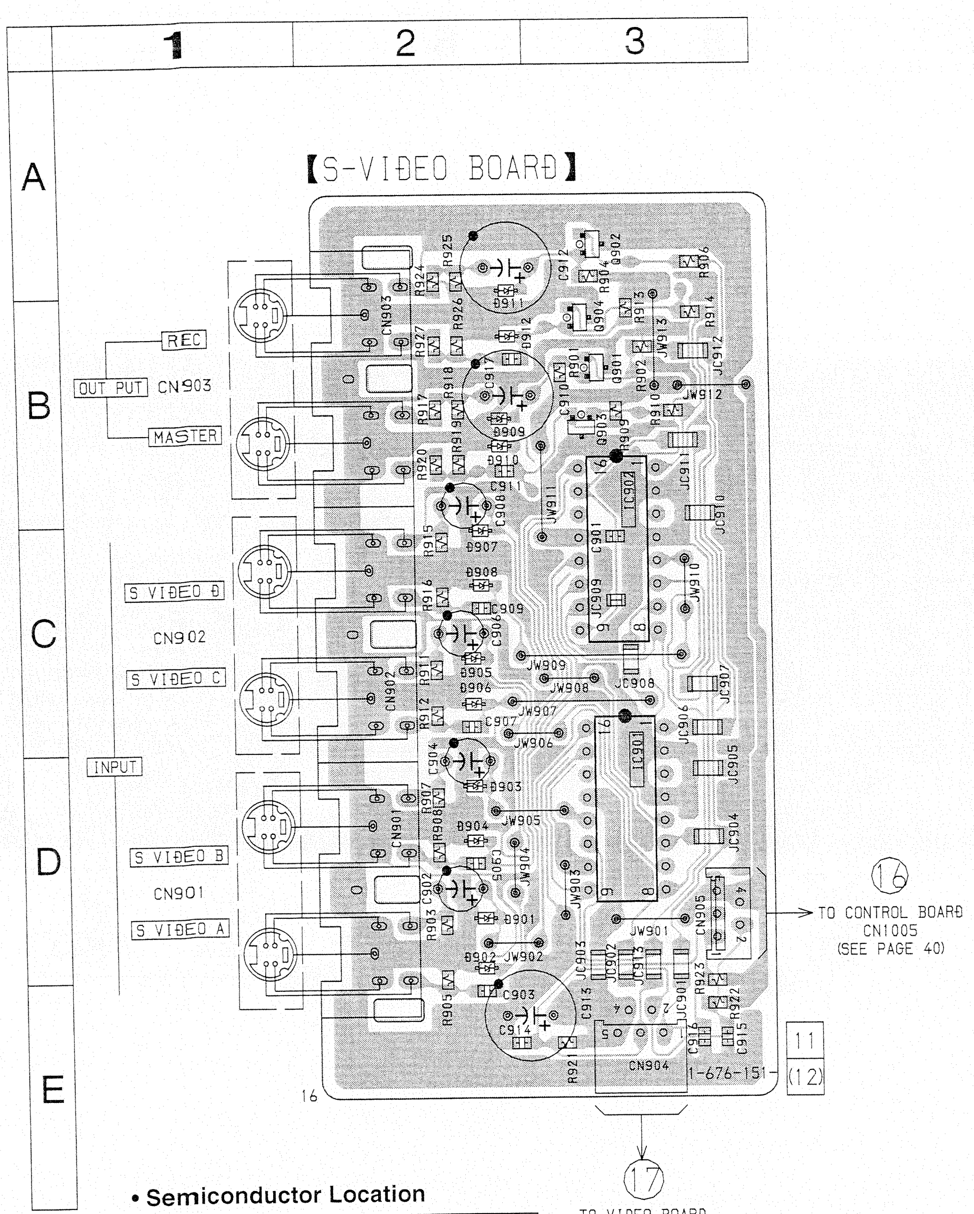
17
A
B
C
D
E
F
G
H
I
J
K
L
[MIX BOARD]
(1/2)
IC301
IC301 (1/2) NJM4580E-D BUFFER
IC301 (2/2) NJM4580E-D LINE AMP
IC302 (1/2) NJM4580E-D BUFFER
IC302 (2/2) NJM4580E-D LINE AMP
IC303 (1/2) NJM4580E-D BUFFER
IC303 (2/2) NJM4580E-D LINE AMP
IC304 (1/2) NJM4580E-D BUFFER
IC304 (2/2) NJM4580E-D LINE AMP
IC312 MIX AMP
IC312 (1/2) NJM4580E-D
IC312 (2/2) NJM4580E-D
IC313
IC313 (1/2) NJM4580E-D BUFFER
IC313 (2/2) NJM4580E-D
IC314 MIX AMP
IC314 (1/2) NJM4580E-D
IC314 (2/2) NJM4580E-D
IC315 MIX AMP
IC315 (1/2) NJM4580E-D
IC315 (2/2) NJM4580E-D
MIC1 ECHO
MIC2 ECHO
MIC3 ECHO
MIC4 ECHO
RV301 50k B
RV302 50k B
RV303 50k B
RV304 50k B
B+
B-
DBBU (NOR)
DBBU (INV)
MIC GROUP
DBBU (INV) BUS
DBBU (NOR) BUS
CN302 BOARD TO BOARD
6 TO FADER BOARD CN1101
1 MIC1 FADER SEND
2 AGND
3 MIC1 FADER RETURN
4 AGND
5 MIC2 FADER SEND
6 AGND
7 MIC2 FADER RETURN
8 AGND
1 TO AUDIO CN007
CN303 FFC
1 LED1
2 MIC1
3 AGND (M1)
4 LED2
5 MIC2
6 AGND (M2)
7 MIC3
8 AGND (M3)
9 MIC4
10 AGND (M4)
11 ST1R
12 AGND (1R)
13 ST1L
14 AGND (1L)
15 ST2R
16 AGND (2R)
17 ST2L
18 AGND (2L)
19 ST3R
20 AGND (3R)
21 ST3L
22 AGND (3L)
23 E-R-R
24 AGND (ERR)
25 E-R-L
26 AGND (ERL)
27 +15V
28 +15V
29 AGND
30 AGND
31 -15V
32 -15V
33 DGND
34 DGND
35 +5V
7 TO FADER BOARD CN1102
CN304 BOARD TO BOARD
1 MIC3 FADER SEND
2 AGND
3 MIC3 FADER RETURN
4 AGND
5 MIC4 FADER SEND
6 AGND
7 MIC4 FADER RETURN
8 AGND
CN301 FFC
M.G.INSERT OUT 27
AGND (MGIO) 26
AFTER ASSIGN 25
AGND (AA) 24
M.G.INSERT IN 23
AGND (MGII) 22
ECHO SEND 21
AGND (ES) 20
MIC GROUP OUT 19
AGND (MGO) 18
RECOUT L 17
AGND (RL) 16
RECOUT R 15
AGND (RR) 14
TO L INSERT 13
AGND (TLI) 12
TO R INSERT 11
AGND (TRI) 10
L INSERT IN 9
AGND (LII) 8
R INSERT IN 7
AGND (RII) 6
TO MASTER L 5
AGND (TML) 4
TO MASTER R 3
AGND (TMR) 2
+48V LED 1
2 TO AUDIO BOARD CN010
MIC GROUP VOL 15
AGND (MGV) 14
MIC GROUP OUT 13
AGND (MGO) 12
L INSERT IN 11
AGND (LII) 10
R INSERT IN 9
AGND (RII) 8
MASTER L 7
AGND (ML) 6
MASTER R 5
AGND (MR) 4
+15V 3
AGND 2
-15V 1
CN305 FFC
11 TO MASTER BOARD CN702
MIX TO MIX BOARD (2/2)
(ECHO) (+15V) (AGND) (-15V) (DGND) (+5V) (LED2) (LED1)
TO MIX BOARD (2/2)
(REC L) (REC R)
TO MIX BOARD (2/2)
(ST2L) (ST2R) (+48V LED)
TO MIX BOARD (2/2)
16

3-15. SCHEMATIC DIAGRAM – MIX SECTION (2/2) –


TO MIX BOARD (1/2)
TO MIX BOARD 1/2
MIX
8 TO FADER BOARD CN1103
ST1L FADER SEND
AGND
ST1L FADER RETURN
ST1R FADER SEND
ST1R FADER RETURN
CN304 BOARD TO BOARD
IC305, 307, 309, 311 BUFFER
IC306, 308, 310 LINE AMP
NJM4580E-D
ST1 ECHO
RV305 50k/50k
9 TO FADER BOARD CN1104
ST2L FADER SEND
ST2L FADER RETURN
ST2R FADER SEND
ST2R FADER RETURN
CN308 BOARD TO BOARD
ST2 ECHO
RV306 50k/50k
10 TO FADER BOARD CN1105
ST3L FADER SEND
ST3L FADER RETURN
ST3R FADER SEND
ST3R FADER RETURN
CN310 BOARD TO BOARD
ST3 ECHO
RV307 50k/50k
ECHO RETURN SWITCH
ON
OFF
S301
DGBU (INV)
DGBU (NOR)
+48V LED
+15V
AGND
-15V
LED1
LED2
VOL DOWN
VOL UP
12 TO FADER BOARD CN1106
CN307 BOARD TO BOARD
IC316 VOL DRIVE
IC316 BA6208
MASTER VOL UP
MASTER VOL DOWN
VOL LED
DGND
14 TO VOL BOARD CN2102
CN309 EH
[MIX BOARD] (2/2)

3-16. PRINTED WIRING BOARD – S-VIDEO SECTION –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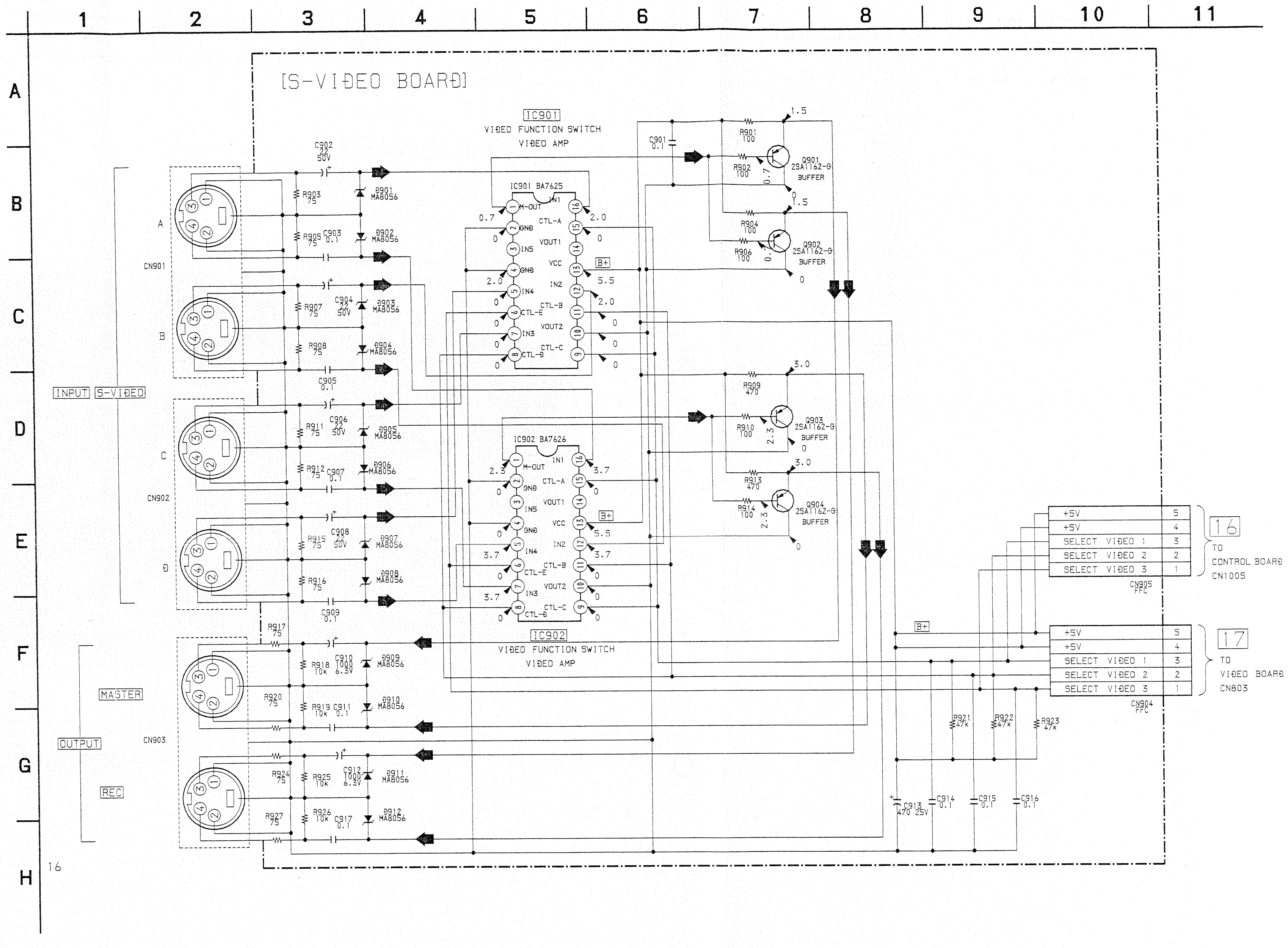
A
B
C
D
E
【S-VIDEO BOARD】
REC
OUT PUT
CN903
MASTER
S VIDEO D
CN902
S VIDEO C
INPUT
S VIDEO B
CN901
S VIDEO A
16
TO CONTROL BOARD CN1005 (SEE PAGE 40)
17
TO VIDEO BOARD CN803 (SEE PAGE 36)
IC901
IC902
CN904
CN905
1-676-151-
11
(12)

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D901	D-2	IC901	D-3
D902	D-2	IC902	B-3
D903	D-2		
D904	D-2	Q901	B-3
D905	C-2	Q902	A-3
D906	C-2	Q903	B-3
D907	C-2	Q904	B-3
D908	C-2		
D909	B-2		
D910	B-2		
D911	A-2		
D912	B-2		

3-17. SCHEMATIC DIAGRAM – S-VIDEO SECTION –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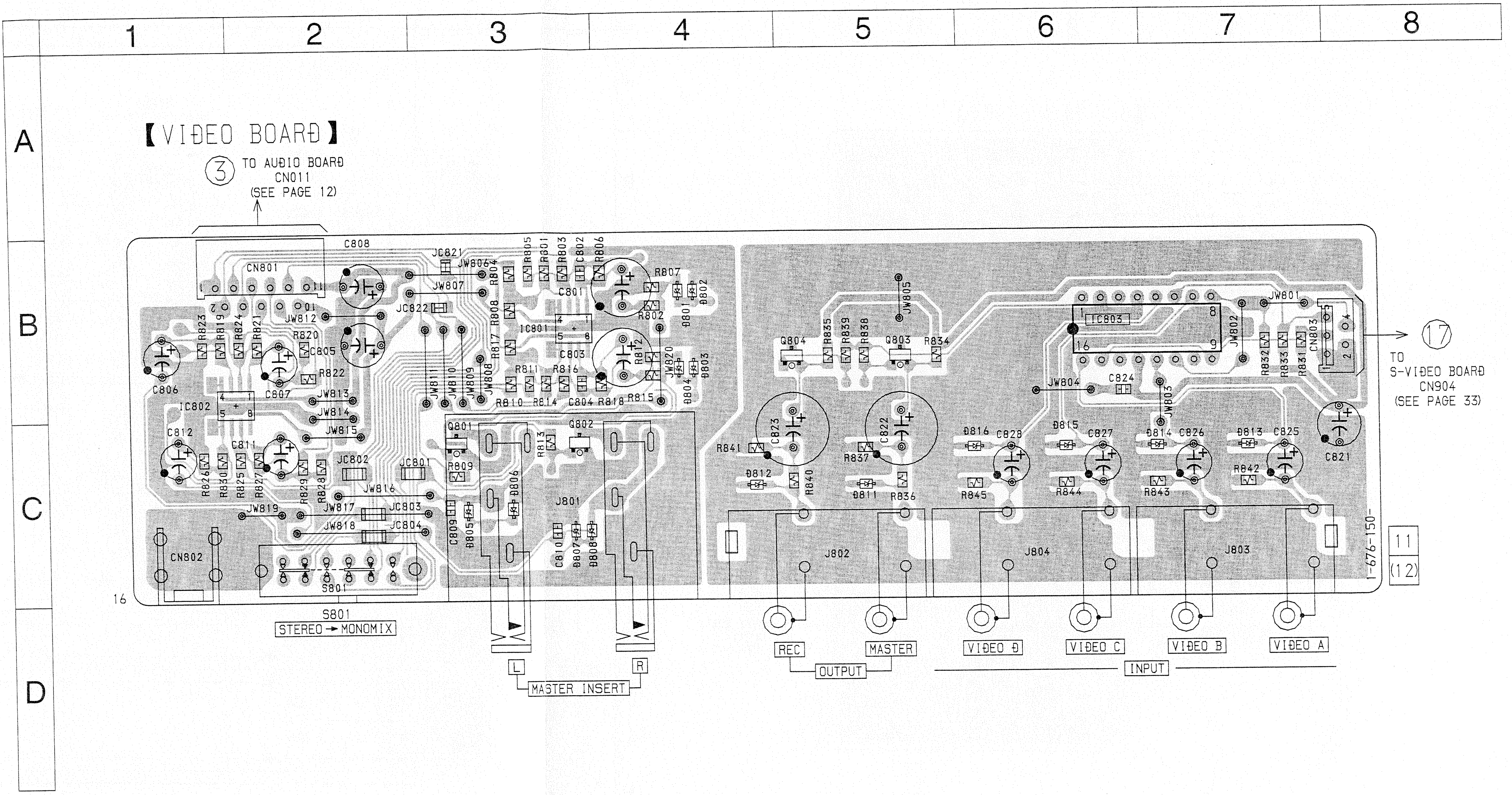
A
B
C
D
E
F
G
H
[S-VIDEO BOARD]
IC901
VIDEO FUNCTION SWITCH
VIDEO AMP
IC901 BA7625
IC902 BA7626
IC902
VIDEO FUNCTION SWITCH
VIDEO AMP
Q901 2SA1162-G BUFFER
Q902 2SA1162-G BUFFER
Q903 2SA1162-G BUFFER
Q904 2SA1162-G BUFFER
CN901
CN902
CN903
INPUT
S-VIDEO
MASTER
OUTPUT
REC
+5V
SELECT VIDEO 1
SELECT VIDEO 2
SELECT VIDEO 3
16
TO CONTROL BOARD CN1005
CN905 FFC
17
TO VIDEO BOARD CN803
CN904 FFC
B+

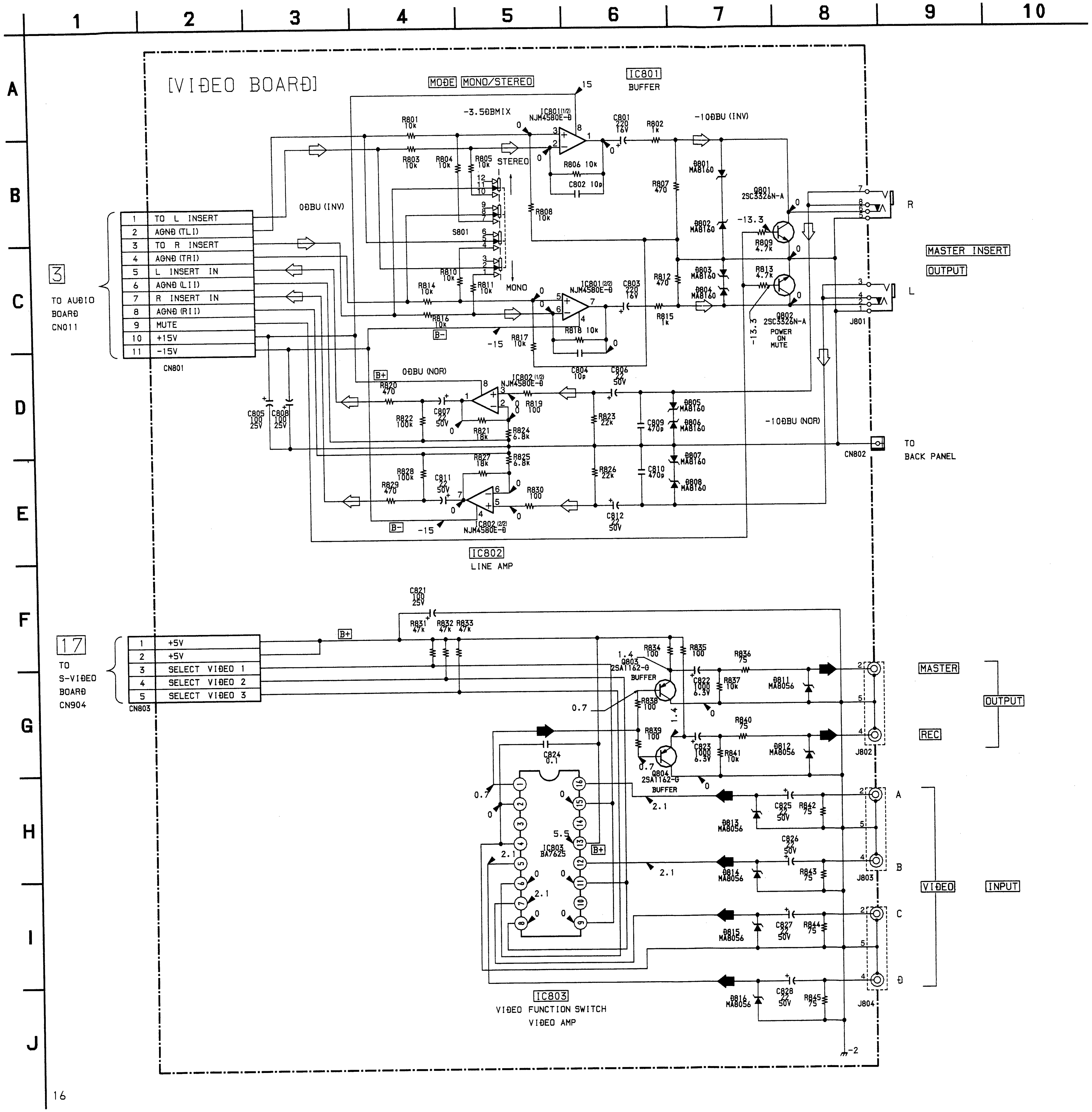
3-18. PRINTED WIRING BOARD – VIDEO SECTION –

- **Semiconductor Location**

Ref. No.	Location
D801	B-4
D802	B-4
D803	B-4
D804	B-4
D805	C-3
D806	C-3
D807	C-3
D808	C-3
D811	C-5
D812	C-4
D813	C-7
D814	C-7
D815	C-6
D816	C-6
IC801	B-3
IC802	B-1
IC803	B-6
Q801	C-3
Q802	C-3
Q803	B-5
Q804	B-5


1
2
3
4
5
6
7
8
A
B
C
D
【VIDEO BOARD】
③ TO AUDIO BOARD CN011 (SEE PAGE 12)
⑰ TO S-VIDEO BOARD CN904 (SEE PAGE 33)
CN801
CN802
CN803
IC801
IC802
IC803
Q801
Q802
Q803
Q804
J801
J802
J803
J804
S801
STEREO → MONOMIX
L
R
MASTER INSERT
REC
MASTER
OUTPUT
VIDEO D
VIDEO C
VIDEO B
VIDEO A
INPUT
1-676-150-
11
(12)

3-19. SCHEMATIC DIAGRAM – VIDEO SECTION –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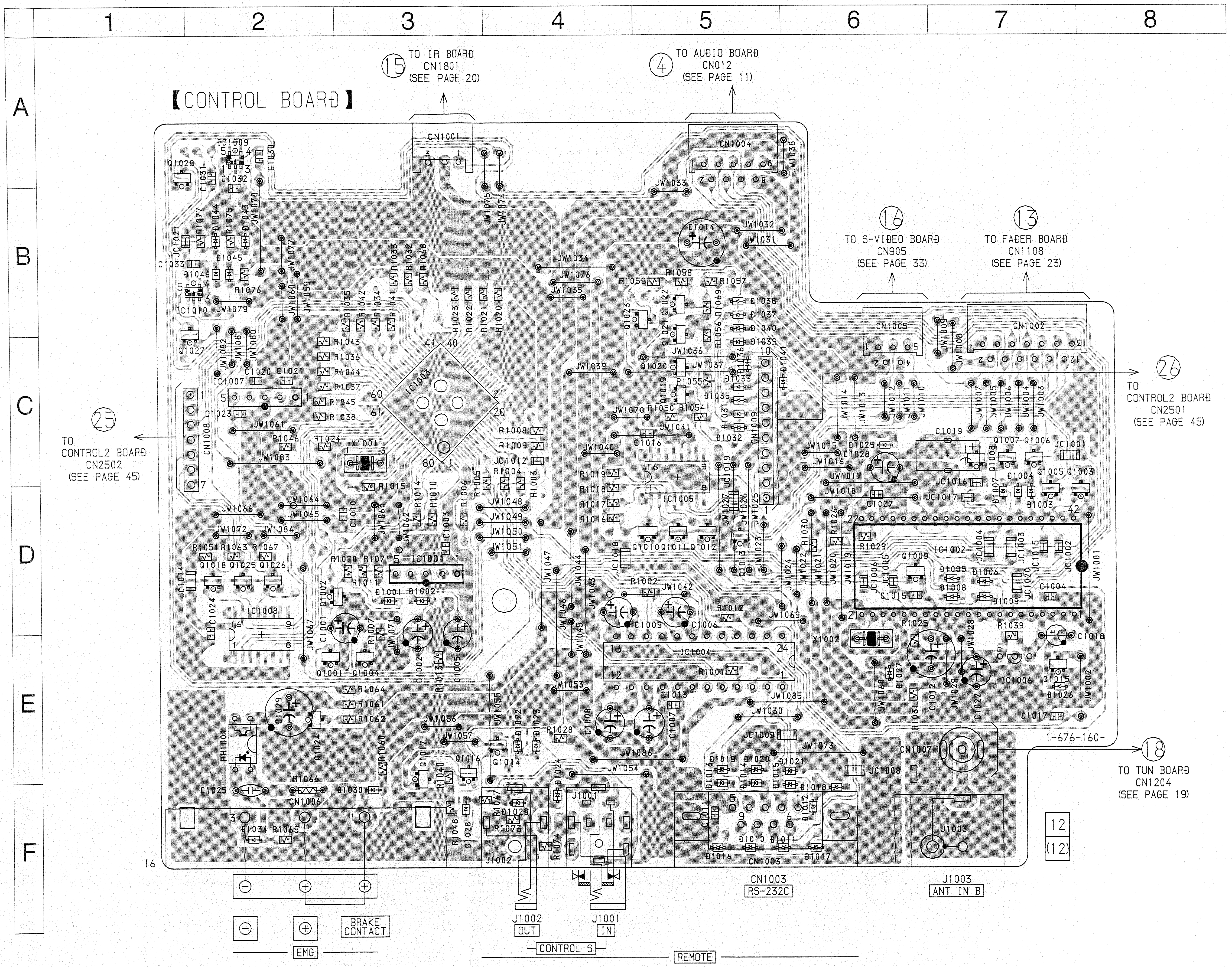
9
10
A
B
C
D
E
F
G
H
I
J
16
[VIDEO BOARD]
MODE MONO/STEREO
IC801
BUFFER
-3.5DBMIX
IC801(1/2) NJM4580E-D
IC801(2/2) NJM4580E-D
-10DBU (INV)
0DBU (INV)
STEREO
MONO
S801
R801 10k
R802 1k
R803 10k
R804 10k
R805 10k
R806 10k
R807 470
R808 10k
R809 4.7k
R810 10k
R811 10k
R812 470
R813 4.7k
R814 10k
R815 1k
R816 10k
R817 10k
R818 10k
C801 220 16V
C802 10p
C803 220 16V
C804 10p
C806 22 50V
D801 MA8160
D802 MA8160
D803 MA8160
D804 MA8160
Q801 2SC3326N-A
Q802 2SC3326N-A
POWER ON MUTE
-13.3
15
-15
B-
B+
J801
R
L
MASTER INSERT
OUTPUT
3
TO AUDIO BOARD CN011
1 TO L INSERT
2 AGND (TLI)
3 TO R INSERT
4 AGND (TRI)
5 L INSERT IN
6 AGND (LII)
7 R INSERT IN
8 AGND (RII)
9 MUTE
10 +15V
11 -15V
CN801
C805 100 25V
C808 100 25V
0DBU (NOR)
IC802(1/2) NJM4580E-D
IC802(2/2) NJM4580E-D
R819 100
R820 470
R821 18k
R822 100k
R823 22k
R824 6.8k
R825 6.8k
R826 22k
R827 18k
R828 100k
R829 470
R830 100
C807 22 50V
C809 470p
C810 470p
C811 22 50V
C812 22 50V
D805 MA8160
D806 MA8160
D807 MA8160
D808 MA8160
-10DBU (NOR)
CN802
TO BACK PANEL
IC802
LINE AMP
C821 100 25V
R831 47k
R832 47k
R833 47k
17
TO S-VIDEO BOARD CN904
1 +5V
2 +5V
3 SELECT VIDEO 1
4 SELECT VIDEO 2
5 SELECT VIDEO 3
CN803
Q803 2SA1162-G
BUFFER
Q804 2SA1162-G
BUFFER
R834 100
R835 100
R836 75
R837 10k
R838 100
R839 100
R840 75
R841 10k
R842 75
R843 75
R844 75
R845 75
C822 1000 6.3V
C823 1000 6.3V
C824 0.1
C825 22 50V
C826 22 50V
C827 22 50V
C828 22 50V
D811 MA8056
D812 MA8056
D813 MA8056
D814 MA8056
D815 MA8056
D816 MA8056
IC803 BA7625
1.4
0.7
2.1
5.5
J802
J803
J804
MASTER
REC
OUTPUT
A
B
C
D
VIDEO
INPUT
IC803
VIDEO FUNCTION SWITCH
VIDEO AMP
-2

3-20. PRINTED WIRING BOARD – CONTROL SECTION –

- Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D1001	D-3	IC1001	D-3
D1002	D-3	IC1002	D-7
D1003	D-7	IC1003	C-3
D1004	D-7	IC1004	E-5
D1005	D-7	IC1005	C-5
D1006	D-7	IC1006	E-7
D1007	D-7	IC1007	C-2
D1008	D-7	IC1008	D-2
D1009	D-7	IC1009	A-2
D1010	F-5	IC1010	B-2
D1011	F-6		
D1012	F-6	Q1001	E-2
D1013	E-5	Q1002	D-2
D1014	E-5	Q1003	D-7
D1015	E-6	Q1004	E-3
D1016	F-5	Q1005	D-7
D1017	F-6	Q1006	C-7
D1018	E-6	Q1007	C-7
D1019	E-5	Q1008	C-7
D1020	E-5	Q1009	D-6
D1021	E-6	Q1010	D-5
D1022	E-4	Q1011	D-5
D1023	E-4	Q1012	D-5
D1024	F-4	Q1013	D-5
D1025	C-6	Q1014	E-4
D1026	E-7	Q1015	E-7
D1027	E-6	Q1016	E-3
D1028	F-3	Q1017	E-3
D1029	F-4	Q1018	D-2
D1030	F-3	Q1019	C-5
D1031	C-5	Q1020	C-5
D1032	C-5	Q1021	B-5
D1033	C-5	Q1022	B-5
D1034	F-2	Q1023	B-5
D1035	C-5	Q1024	E-2
D1036	C-5	Q1025	D-2
D1037	B-5	Q1026	D-2
D1038	B-5	Q1027	B-2
D1039	C-5	Q1028	A-1
D1040	B-5		
D1041	C-6		
D1043	B-2		
D1044	B-2		
D1045	B-2		
D1046	B-2		


1
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3
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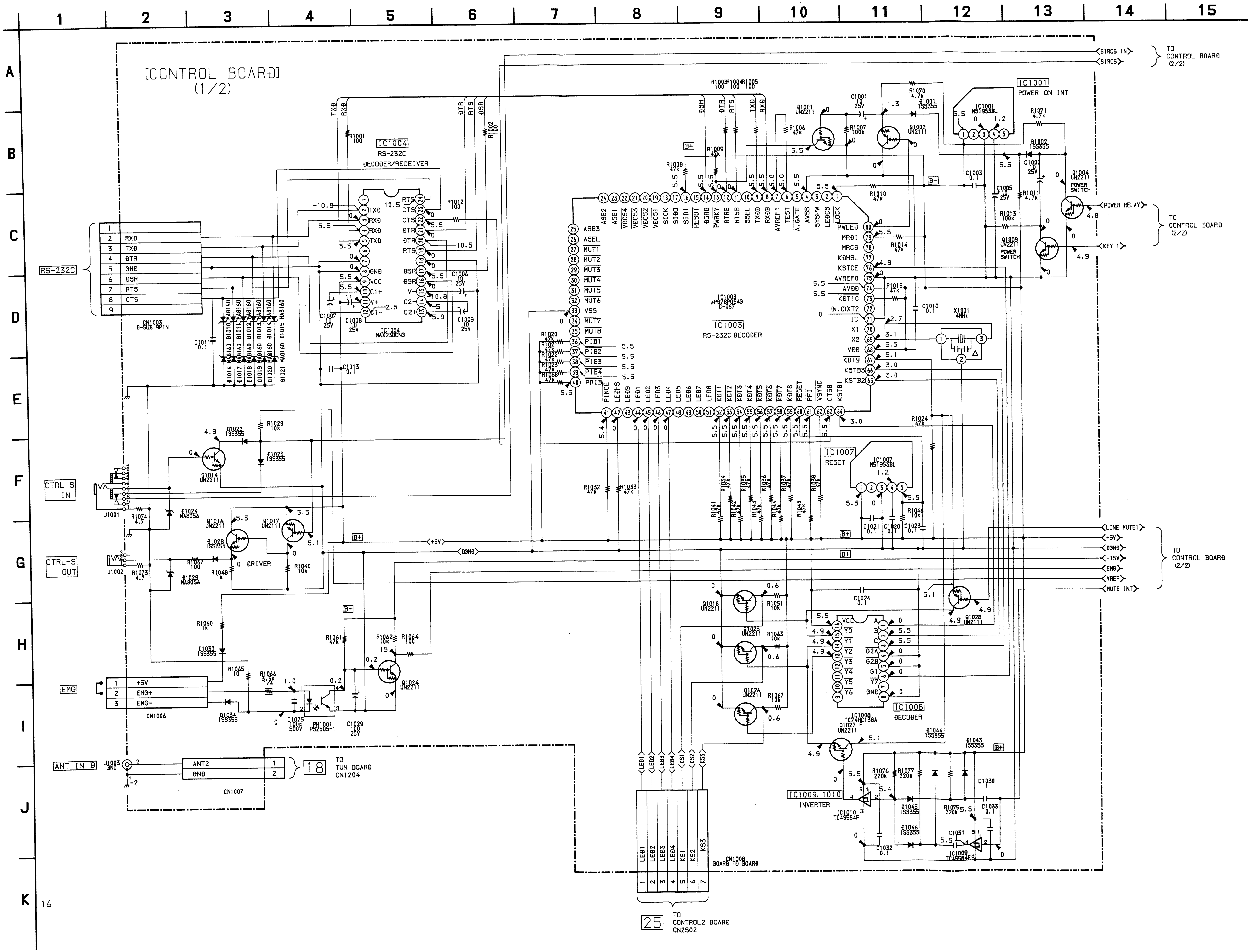
7
8
A
B
C
D
E
F
【CONTROL BOARD】
⑮ TO IR BOARD CN1801 (SEE PAGE 20)
④ TO AUDIO BOARD CN012 (SEE PAGE 11)
⑯ TO S-VIDEO BOARD CN905 (SEE PAGE 33)
⑬ TO FADER BOARD CN1108 (SEE PAGE 23)
㉖ TO CONTROL2 BOARD CN2501 (SEE PAGE 45)
㉕ TO CONTROL2 BOARD CN2502 (SEE PAGE 45)
⑱ TO TUN BOARD CN1204 (SEE PAGE 19)
CN1001
CN1004
CN1005
CN1002
CN1008
CN1009
CN1006
CN1007
CN1003
IC1003
IC1002
IC1004
IC1005
IC1001
IC1006
IC1007
IC1008
IC1009
IC1010
X1001
X1002
PH1001
1-676-160-
J1002
J1001
J1003
BRAKE CONTACT
EMG
J1002 OUT
J1001 IN
CONTROL S
REMOTE
CN1003 RS-232C
J1003 ANT IN B
12
(12)
16

3-21. SCHEMATIC DIAGRAM – CONTROL SECTION (1/2) –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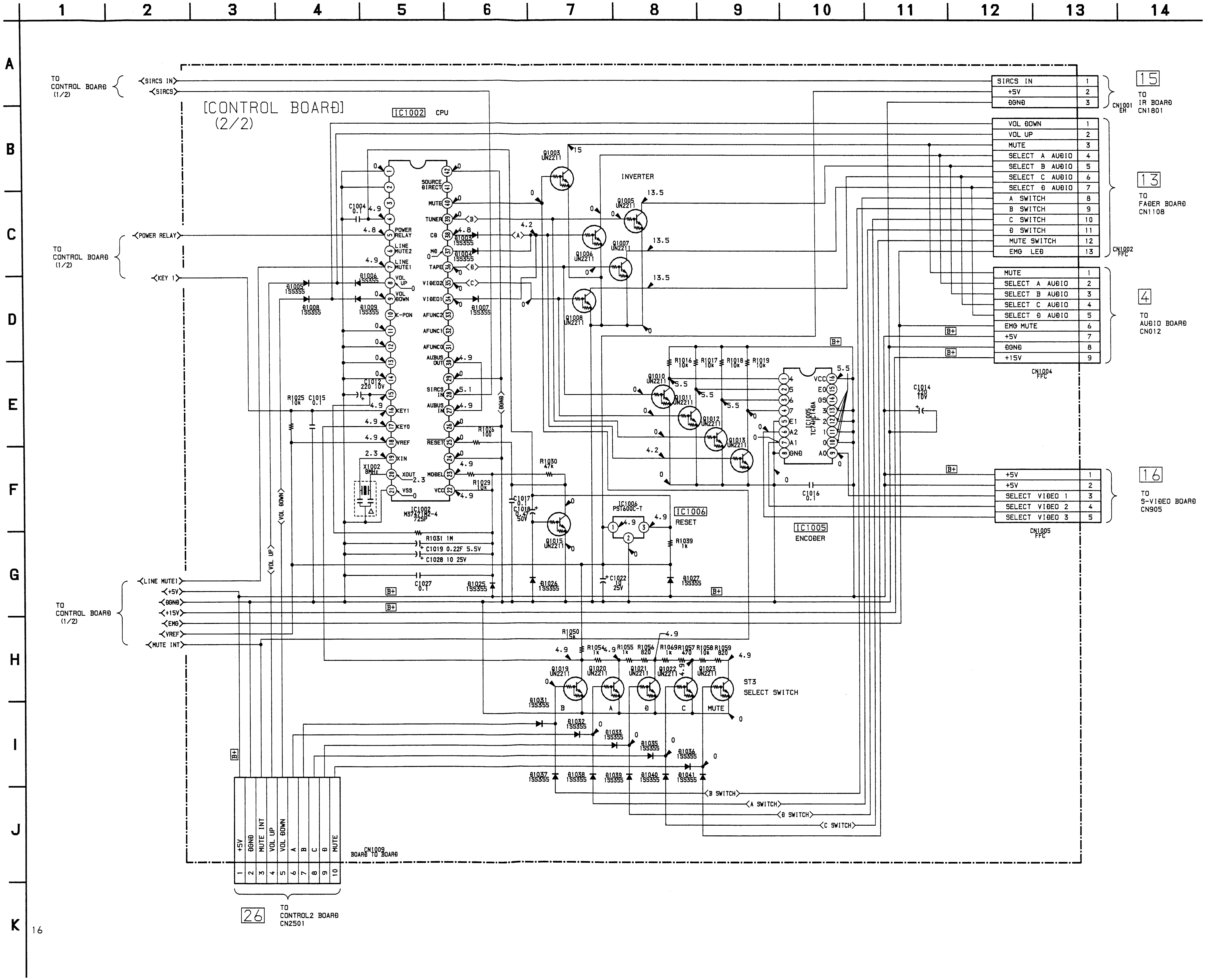
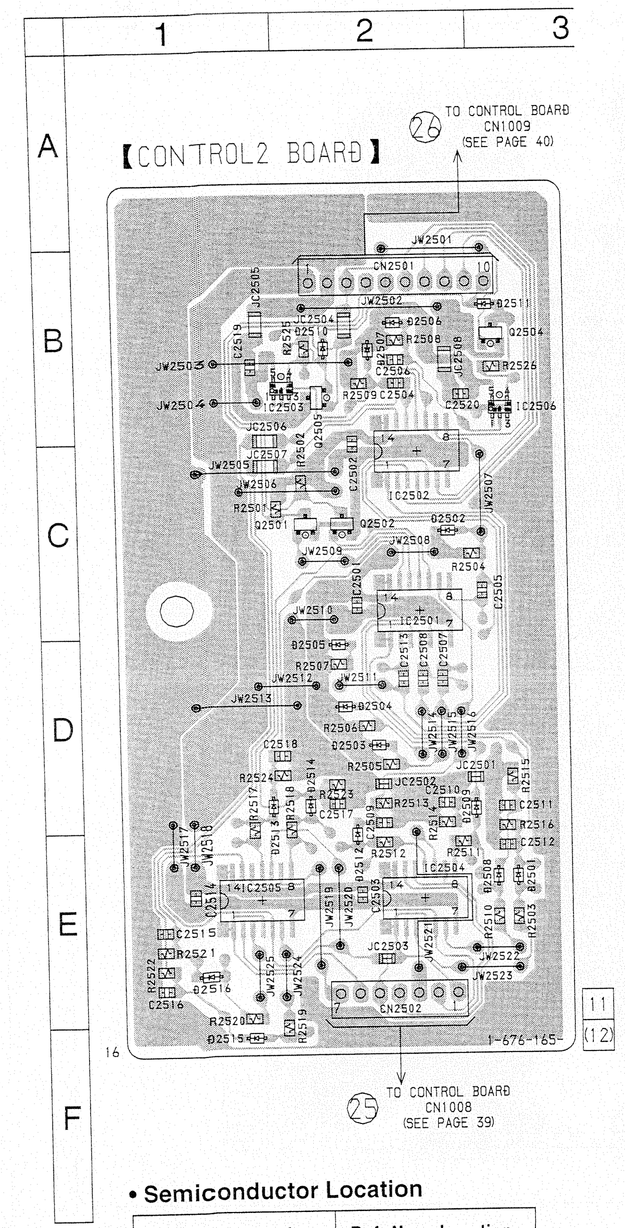
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K
16
[CONTROL BOARD]
(1/2)
IC1004
RS-232C
DECODER/RECEIVER
IC1004
MAX238CNG
RS-232C
CN1003
D-SUB 9PIN
RXD
TXD
DTR
GND
DSR
RTS
CTS
IC1003
μPD78P054G
C-067
IC1003
RS-232C DECODER
IC1001
POWER ON INT
IC1001
M5T953BL
Q1004
UN2211
POWER SWITCH
Q1009
UN2211
POWER SWITCH
X1001
4MHz
<SIRCS IN>
<SIRCS>
TO
CONTROL BOARD
(2/2)
<POWER RELAY>
<KEY 1>
IC1007
RESET
IC1007
M5T953BL
CTRL-S
IN
J1001
CTRL-S
OUT
J1002
DRIVER
EMG
+5V
EMG+
EMG-
CN1006
PH1001
PS2505-1
ANT IN B
J1003
BNC
ANT2
GND
CN1007
18
TO
TUN BOARD
CN1204
<+5V>
<DGND>
B+
<LINE MUTE1>
<+5V>
<DGND>
<+15V>
<EMG>
<VREF>
<MUTE INT>
IC1008
DECODER
IC1008
TC74HC138A
IC1009, 1010
INVERTER
IC1010
TC4S584F
IC1009
TC4S584F
LED1
LED2
LED3
LED4
KS1
KS2
KS3
CN1008
BOARD TO BOARD
25
TO
CONTROL2 BOARD
CN2502

3-22. SCHEMATIC DIAGRAM – CONTROL SECTION (2/2) –


[CONTROL BOARD]
(2/2)
IC1002 CPU
IC1002
M37471M2-4
725SP
TO CONTROL BOARD (1/2)
SIRCS IN
SIRCS
POWER RELAY
KEY 1
LINE MUTE1
+5V
GGND
+15V
EMG
VREF
MUTE INT
SOURCE DIRECT
MUTE
TUNER
CD
MD
TAPE
VIDEO2
VIDEO1
AFUNC2
AFUNC1
AFUNC0
AUBUS OUT
SIRCS IN
AUBUS IN
RESET
MODEL
VCC
POWER RELAY
LINE MUTE2
LINE MUTE1
VOL UP
VOL DOWN
K-PON
KEY1
KEY0
VREF
XIN
XOUT
VSS
X1002 8MHz
INVERTER
Q1003 UN2211
Q1005 UN2211
Q1006 UN2211
Q1007 UN2211
Q1008 UN2211
Q1010 UN2211
Q1011 UN2211
Q1012 UN2211
Q1013 UN2211
Q1015 UN2211
IC1005 TC74HC148A
IC1005 ENCODER
IC1006 PST600C-T
IC1006 RESET
R1030 47k
R1031 1M
C1019 0.22F 5.5V
C1028 10 25V
C1027 0.1
C1016 0.1
C1014 220 10V
C1022 10 25V
R1039 1k
ST3 SELECT SWITCH
Q1019 UN2211
Q1020 UN2211
Q1021 UN2211
Q1022 UN2211
Q1023 UN2211
B A D C MUTE
B SWITCH
A SWITCH
D SWITCH
C SWITCH
B+
CN1001 EH
SIRCS IN 1
+5V 2
GGND 3
15 TO IR BOARD CN1801
CN1002 FFC
VOL DOWN 1
VOL UP 2
MUTE 3
SELECT A AUDIO 4
SELECT B AUDIO 5
SELECT C AUDIO 6
SELECT D AUDIO 7
A SWITCH 8
B SWITCH 9
C SWITCH 10
D SWITCH 11
MUTE SWITCH 12
EMG LED 13
13 TO FADER BOARD CN1108
CN1004 FFC
MUTE 1
SELECT A AUDIO 2
SELECT B AUDIO 3
SELECT C AUDIO 4
SELECT D AUDIO 5
EMG MUTE 6
+5V 7
GGND 8
+15V 9
4 TO AUDIO BOARD CN012
CN1005 FFC
+5V 1
+5V 2
SELECT VIDEO 1 3
SELECT VIDEO 2 4
SELECT VIDEO 3 5
16 TO S-VIDEO BOARD CN905
CN1009 BOARD TO BOARD
+5V GGND MUTE INT VOL UP VOL DOWN A B C D MUTE
1 2 3 4 5 6 7 8 9 10
26 TO CONTROL2 BOARD CN2501
16

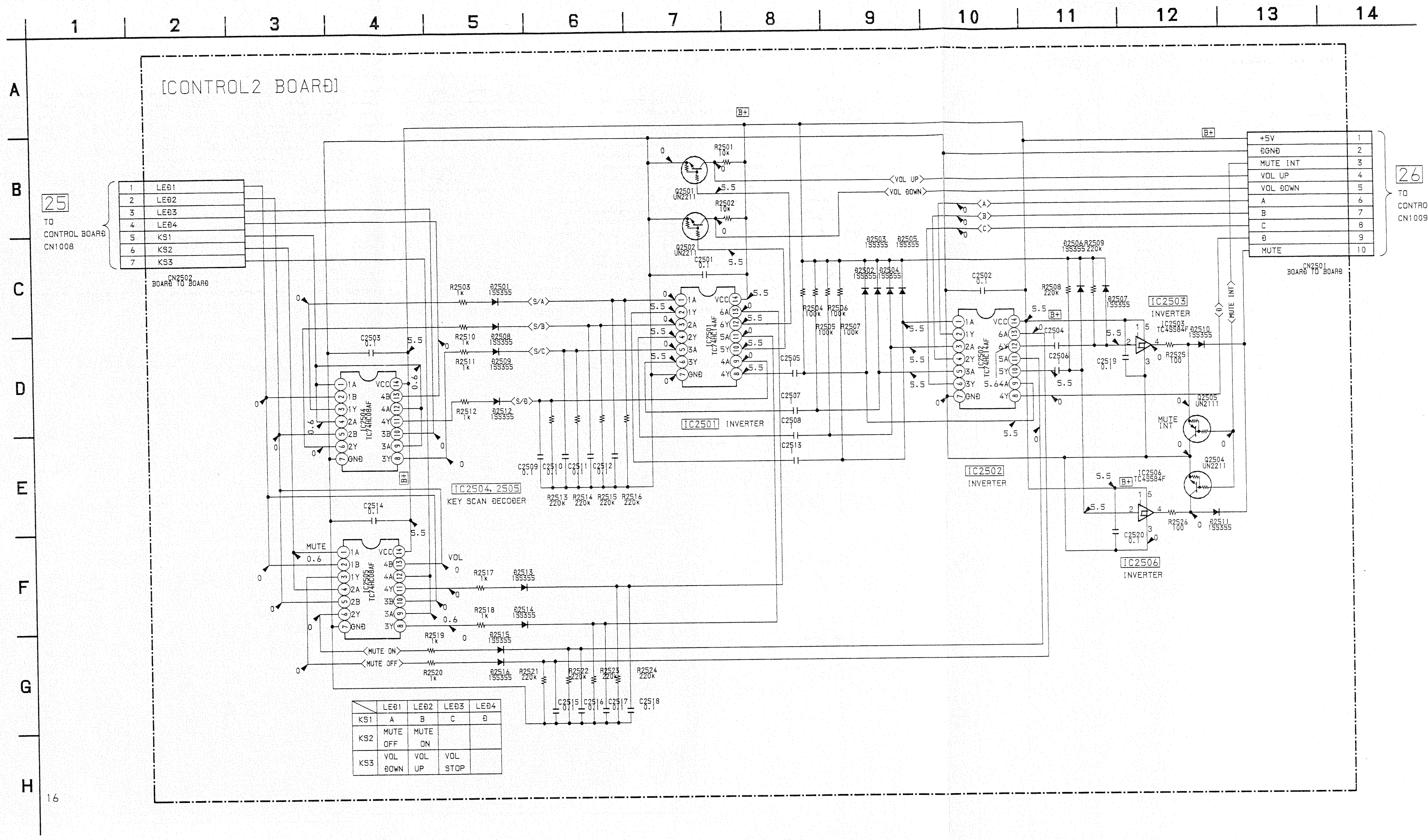
3-23. PRINTED WIRING BOARD – CONTROL2 SECTION –


1
2
3
A
B
C
D
E
F
【CONTROL2 BOARD】
㉖ TO CONTROL BOARD CN1009 (SEE PAGE 40)
㉕ TO CONTROL BOARD CN1008 (SEE PAGE 39)
CN2501
CN2502
JW2501
JW2503
JW2504
IC2501
IC2502
IC2503
IC2504
IC2505
IC2506
Q2501
Q2502
Q2504
Q2505
1-676-165-
11
(12)
16

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D2501	E-3	IC2501	C-2
D2502	C-2	IC2502	C-2
D2503	D-2	IC2503	B-2
D2504	D-2	IC2504	E-2
D2505	D-2	IC2505	E-1
D2506	B-2	IC2506	B-3
D2507	B-2		
D2508	E-3	Q2501	C-2
D2509	D-3	Q2502	C-2
D2510	B-2	Q2504	B-3
D2511	B-3	Q2505	B-2
D2512	E-2		
D2513	D-1		
D2514	D-2		
D2515	F-1		
D2516	E-1		

3-24. SCHEMATIC DIAGRAM – CONTROL2 SECTION –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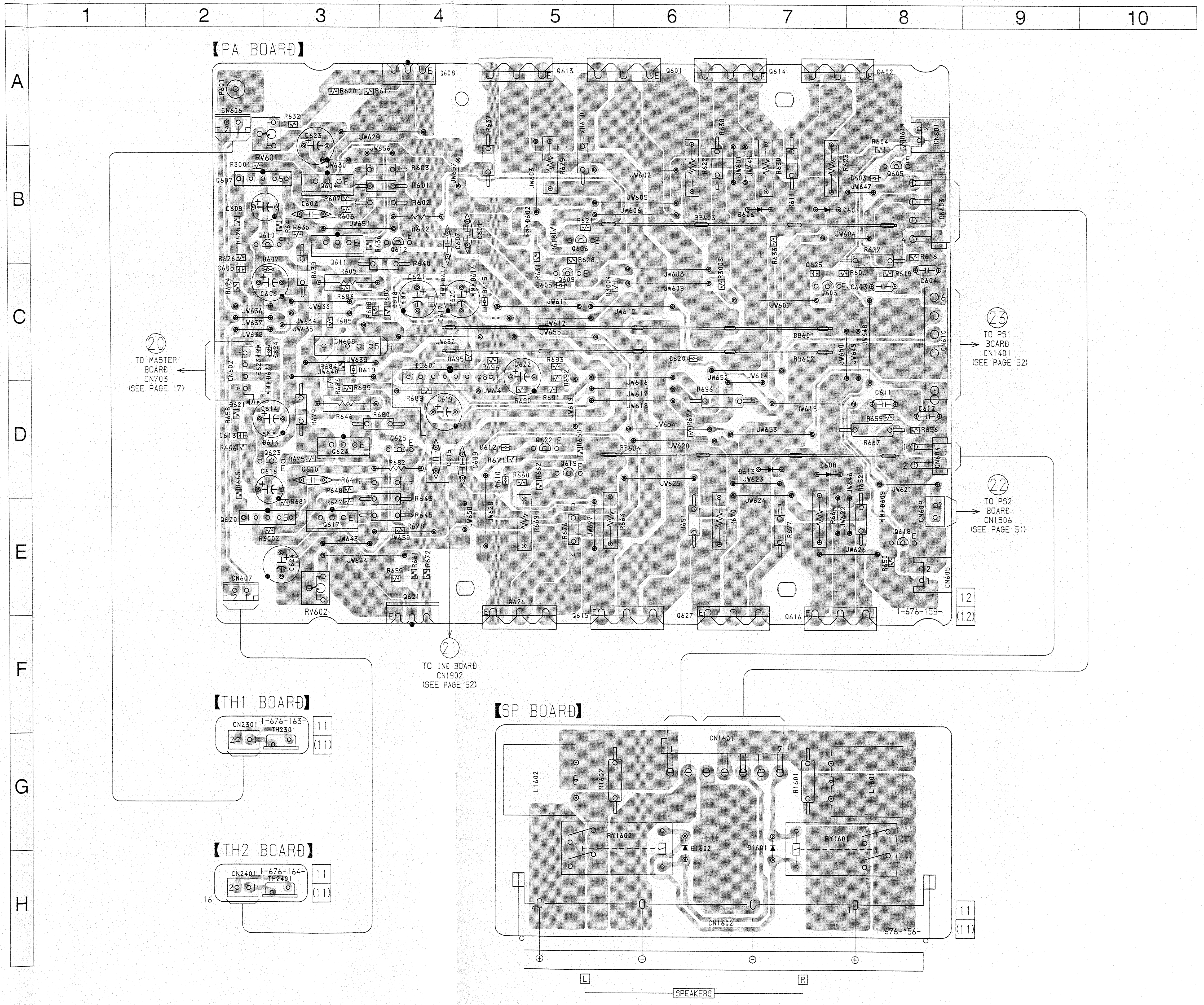
9
10
11
12
13
14
A
B
C
D
E
F
G
H
[CONTROL2 BOARD]
㉕ TO CONTROL BOARD CN1008
CN2502 BOARD TO BOARD
LED1
LED2
LED3
LED4
KS1
KS2
KS3
㉖ TO CONTROL BOARD CN1009
CN2501 BOARD TO BOARD
+5V
GND
MUTE INT
VOL UP
VOL DOWN
A
B
C
D
MUTE
B+
IC2501 INVERTER
IC2502 INVERTER
IC2503 INVERTER
IC2504, 2505 KEY SCAN DECODER
IC2506 INVERTER
Q2501 UN2211
Q2502 UN2211
Q2504 UN2211
Q2505 UN2111
MUTE ON
MUTE OFF
MUTE INT
VOL
16

	LED1	LED2	LED3	LED4
KS1	A	B	C	D
KS2	MUTE OFF	MUTE ON		
KS3	VOL DOWN	VOL UP	VOL STOP	

3-25. PRINTED WIRING BOARD – PA, SP, TH1, TH2 SECTION –

- Semiconductor Location

Ref. No.	Location
D601	B-7
D602	B-5
D603	B-8
D605	C-5
D606	B-7
D607	C-3
D608	D-7
D609	E-8
D610	D-5
D612	D-5
D613	D-7
D614	D-3
D615	C-4
D616	C-4
D617	C-4
D618	C-4
D619	C-3
D620	C-6
D621	D-2
D622	D-3
D623	C-2
D624	C-3
D1601	G-7
D1602	G-6
IC601	C-4
Q601	A-6
Q602	A-8
Q603	C-7
Q604	B-3
Q605	B-8
Q606	B-5
Q607	B-2
Q608	A-4
Q609	C-5
Q610	B-3
Q611	B-3
Q612	B-4
Q613	A-5
Q614	A-7
Q615	E-6
Q616	E-7
Q617	E-3
Q618	E-8
Q619	D-5
Q620	E-2
Q621	E-4
Q622	D-5
Q623	D-3
Q624	D-3
Q625	D-4
Q626	E-5
Q627	E-6


1
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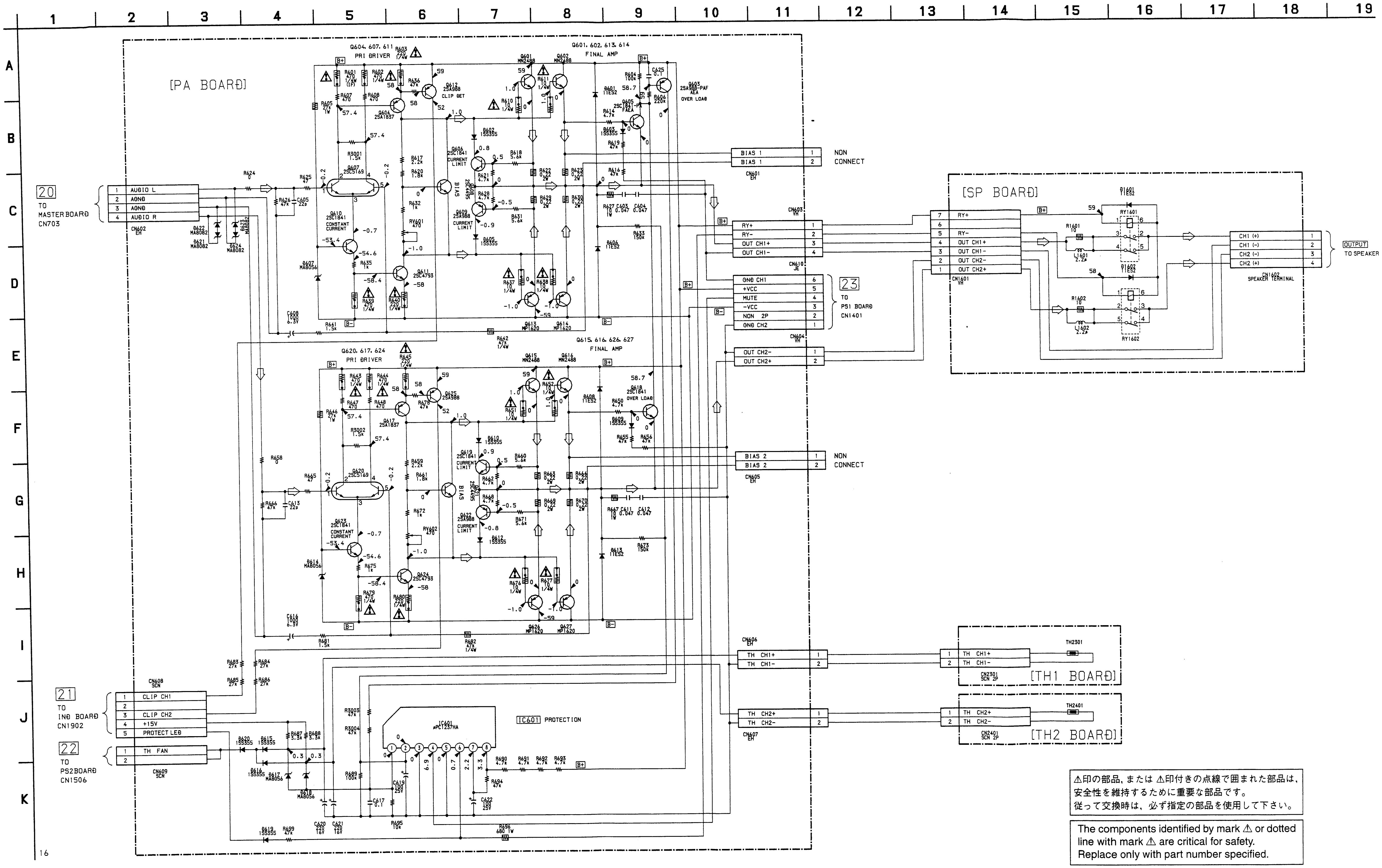
10
A
B
C
D
E
F
G
H
【PA BOARD】
⑳ TO MASTER BOARD CN703 (SEE PAGE 17)
㉑ TO IND BOARD CN1902 (SEE PAGE 52)
㉒ TO PS2 BOARD CN1506 (SEE PAGE 51)
㉓ TO PS1 BOARD CN1401 (SEE PAGE 52)
1-676-159-
12
(12)
【TH1 BOARD】
CN2301
TH2301
1-676-163-
11
(11)
【TH2 BOARD】
CN2401
TH2401
1-676-164-
11
(11)
16
【SP BOARD】
CN1601
CN1602
RY1601
RY1602
D1601
D1602
L1601
L1602
R1601
R1602
1-676-156-
11
(11)
L
R
SPEAKERS

3-26. SCHEMATIC DIAGRAM – PA, SP, TH1, TH2 SECTION –


1
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9
10
11
12
13
14
15
16
17
18
19
A
B
C
D
E
F
G
H
I
J
K
[PA BOARD]
[SP BOARD]
[TH1 BOARD]
[TH2 BOARD]
Q604, 607, 611 PRI DRIVER
Q601, 602, 613, 614 FINAL AMP
Q620, 617, 624 PRI DRIVER
Q615, 616, 626, 627 FINAL AMP
20 TO MASTER BOARD CN703
AUDIO L
AGND
AGND
AUDIO R
CN602 EH
21 TO IND BOARD CN1902
CLIP CH1
CLIP CH2
+15V
PROTECT LED
CN608 SCN
22 TO PS2 BOARD CN1506
TH FAN
CN609 SCN
BIAS 1
BIAS 1
CN601 EH
NON CONNECT
RY+
RY-
OUT CH1+
OUT CH1-
CN603 VH
GND CH1
+VCC
MUTE
-VCC
NON 2P
GND CH2
CN610 JE
23 TO PS1 BOARD CN1401
OUT CH2-
OUT CH2+
CN604 VH
BIAS 2
BIAS 2
CN605 EH
NON CONNECT
TH CH1+
TH CH1-
CN606 EH
TH CH2+
TH CH2-
CN607 EH
CN1601 VH
OUT CH2-
OUT CH2+
RY1601
RY1602
CH1 (+)
CH1 (-)
CH2 (-)
CH2 (+)
CN1602 SPEAKER TERMINAL
OUTPUT TO SPEAKER
TH2301
CN2301 SCN 2P
TH2401
CN2401 SCN 2P
IC601 PROTECTION
IC601 μPC1237HA
CLIP DET
OVER LOAD
CURRENT LIMIT
CONSTANT CURRENT
BIAS
B+
B-
16

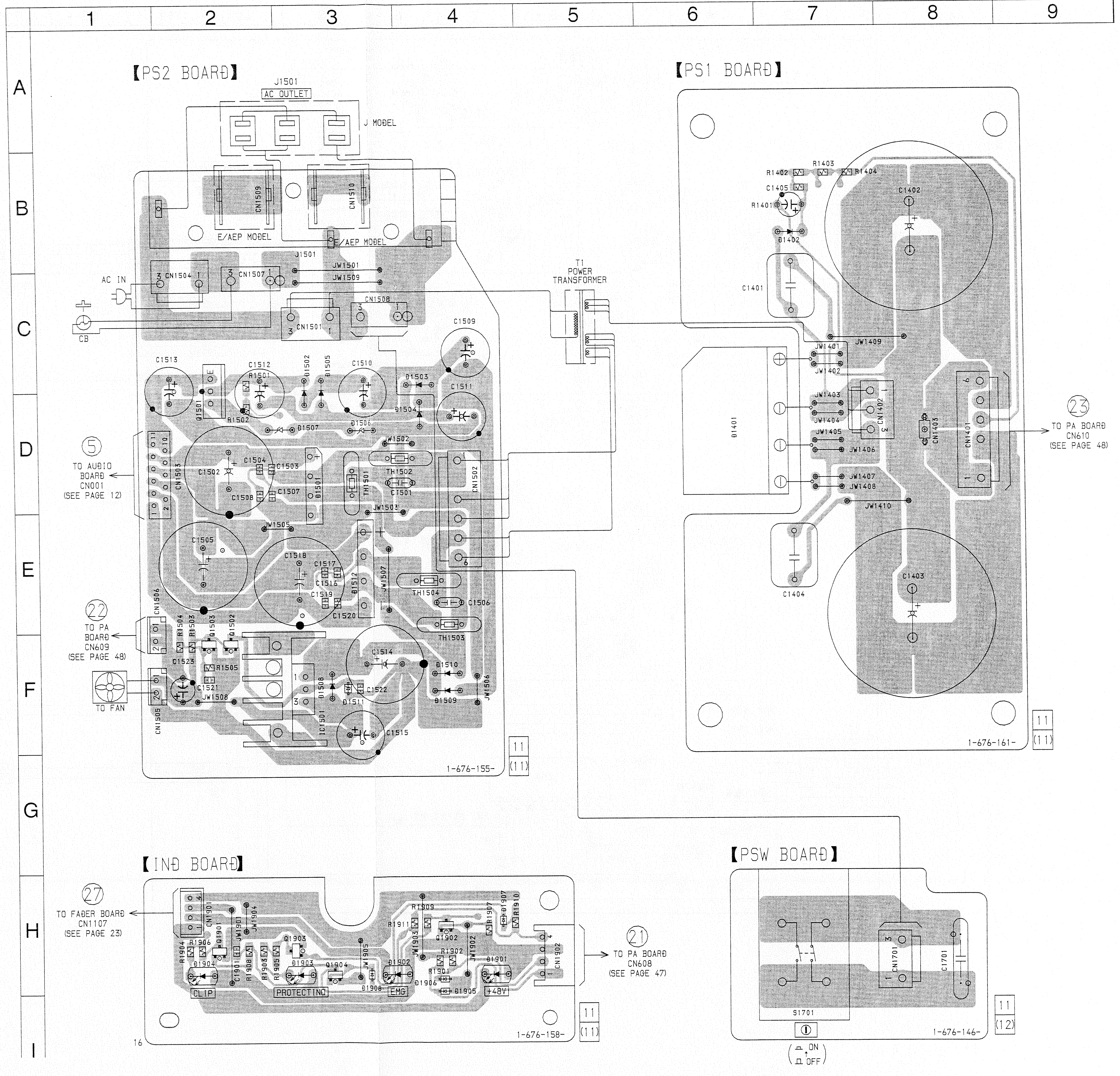
⚠印の部品，または ⚠印付きの点線で囲まれた部品は，安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

3-27. PRINTED WIRING BOARD – IND, PS1, PS2, PSW SECTION –

- Semiconductor Location

Ref. No.	Location
D1401	D-6
D1402	B-7
D1501	D-3
D1502	C-3
D1503	C-4
D1504	D-4
D1505	C-3
D1506	D-3
D1507	D-3
D1508	F-3
D1509	F-4
D1510	F-4
D1511	F-3
D1512	E-3
D1901	H-4
D1902	H-3
D1903	H-3
D1904	H-2
D1905	H-4
D1906	H-4
D1907	H-4
D1908	H-3
IC1501	F-3
Q1501	D-2
Q1502	F-2
Q1503	F-2
Q1901	H-2
Q1902	H-4
Q1903	H-3
Q1904	H-3


1
2
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4
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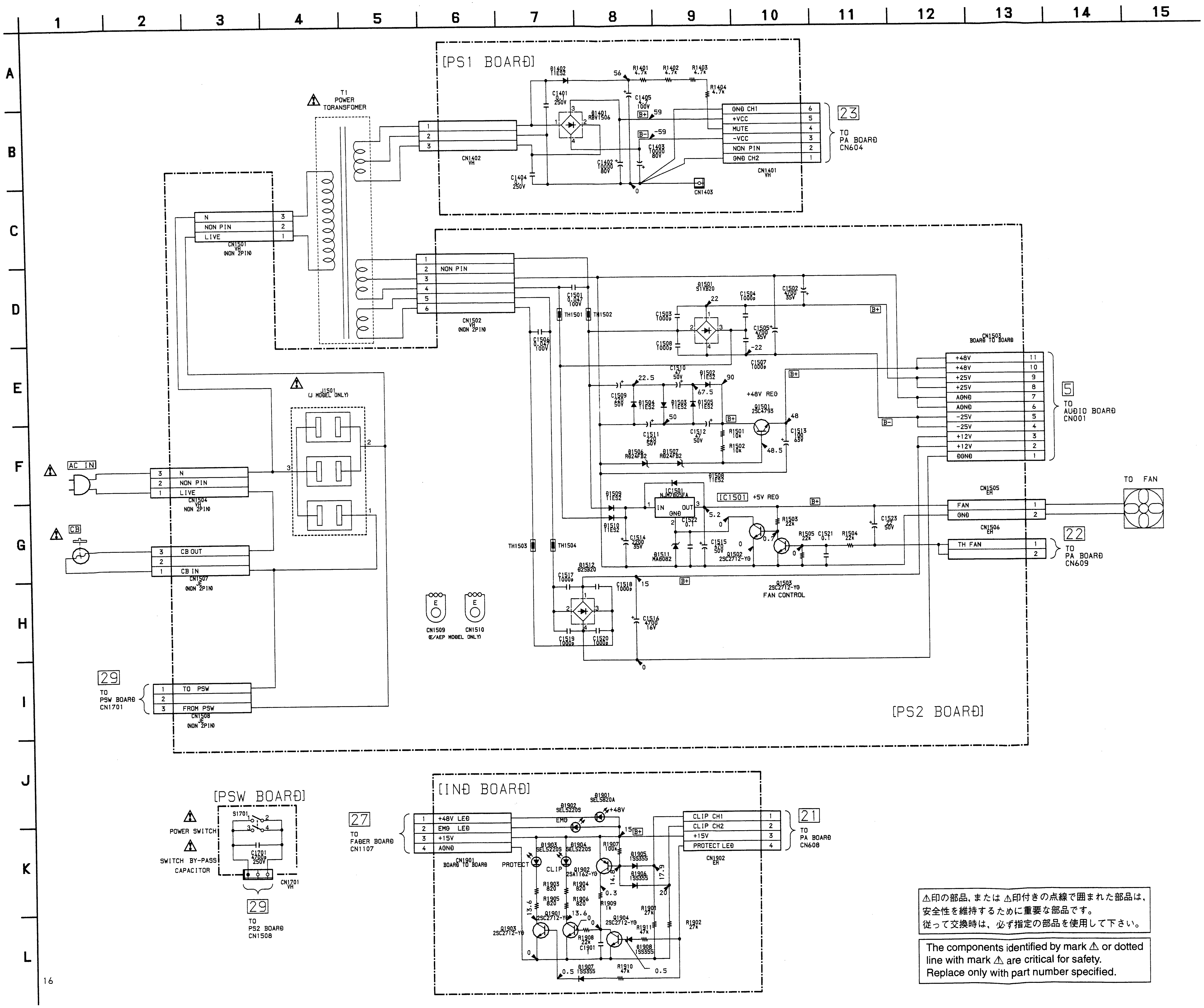
6
7
8
9
A
B
C
D
E
F
G
H
I
【PS2 BOARD】
J1501
AC OUTLET
J MODEL
E/AEP MODEL
AC IN
CB
⑤
TO AUDIO BOARD CN001 (SEE PAGE 12)
㉒
TO PA BOARD CN609 (SEE PAGE 48)
TO FAN
1-676-155-
11
(11)
T1
POWER TRANSFORMER
【PS1 BOARD】
D1401
㉓
TO PA BOARD CN610 (SEE PAGE 48)
1-676-161-
11
(11)
【IND BOARD】
㉗
TO FADER BOARD CN1107 (SEE PAGE 23)
CLIP
PROTECTION
EMG
+48V
㉑
TO PA BOARD CN608 (SEE PAGE 47)
1-676-158-
11
(11)
【PSW BOARD】
S1701
ON
OFF
1-676-146-
11
(12)

3-28. SCHEMATIC DIAGRAM – IND, PS1, PS2, PSW SECTION –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[PS1 BOARD]
[PS2 BOARD]
[PSW BOARD]
[IND BOARD]
T1 POWER TORANSFOMER
AC IN
CB
J1501 (J MODEL ONLY)
CN1501 VH (NON 2PIN)
CN1504 VH NON 2PIN
CN1507 VH (NON 2PIN)
CN1508 VH (NON 2PIN)
CN1509 CN1510 (E/AEP MODEL ONLY)
CN1402 VH
CN1401 VH
CN1403
CN1502 VH (NON 2PIN)
CN1503 BOARD TO BOARD
CN1505 EH
CN1506 EH
CN1701 VH
CN1901 BOARD TO BOARD
CN1902 EH
GND CH1
+VCC
MUTE
-VCC
NON PIN
GND CH2
23
TO PA BOARD CN604
+48V
+25V
AGND
-25V
+12V
DGND
5
TO AUDIO BOARD CN001
TO FAN
FAN
GND
TH FAN
22
TO PA BOARD CN609
29
TO PSW BOARD CN1701
TO PSW
FROM PSW
N
NON PIN
LIVE
CB OUT
CB IN
+48V REG
+5V REG
IC1501 NJM7805FA
FAN CONTROL
Q1501 2SC4793
Q1502 2SC2712-YG
Q1503 2SC2712-YG
D1401 RBV1506
D1501 S1VB20
D1512 G2SB20
TH1501
TH1502
TH1503
TH1504
S1701
POWER SWITCH
SWITCH BY-PASS CAPACITOR
C1701 2700p 250V
29
TO PS2 BOARD CN1508
27
TO FADER BOARD CN1107
+48V LED
EMG LED
+15V
AGND
EMG
PROTECT
CLIP
CLIP CH1
CLIP CH2
PROTECT LED
21
TO PA BOARD CN608
D1901 SEL5820A
D1902 SEL5220S
D1903 SEL5220S
D1904 SEL5220S
Q1901 2SC2712-YG
Q1902 2SA1162-YG
Q1903 2SC2712-YG
Q1904 2SC2712-YG
16

⚠印の部品、または⚠印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。
従って交換時は、必ず指定の部品を使用して下さい。

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

SECTION 4
EXPLODED VIEWS

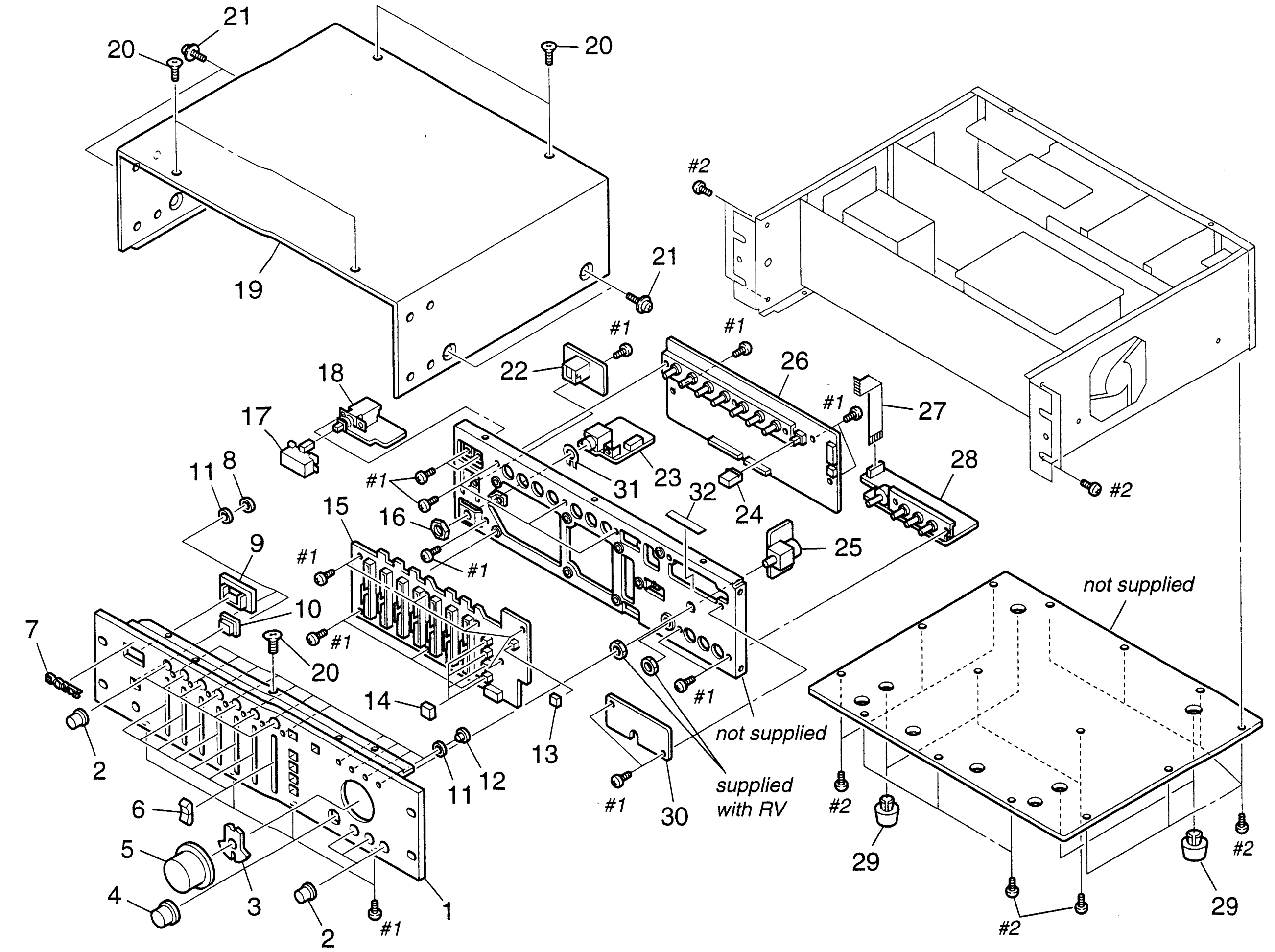
【使用上の注意】
- -XX, -Xは標準化部品のため，セットについている部品と異なる場合があります。
- *印の部品は常時在庫しておりません。
- 分解図中の機構部品で，図面番号のない部品は供給しません。
- ねじ一覧表と付属梱包部は，部品表の最後にあります。

⚠印の部品，または⚠印付の点線で囲まれた部品は，
安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

Note:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

4-1. FRONT PANEL SECTION



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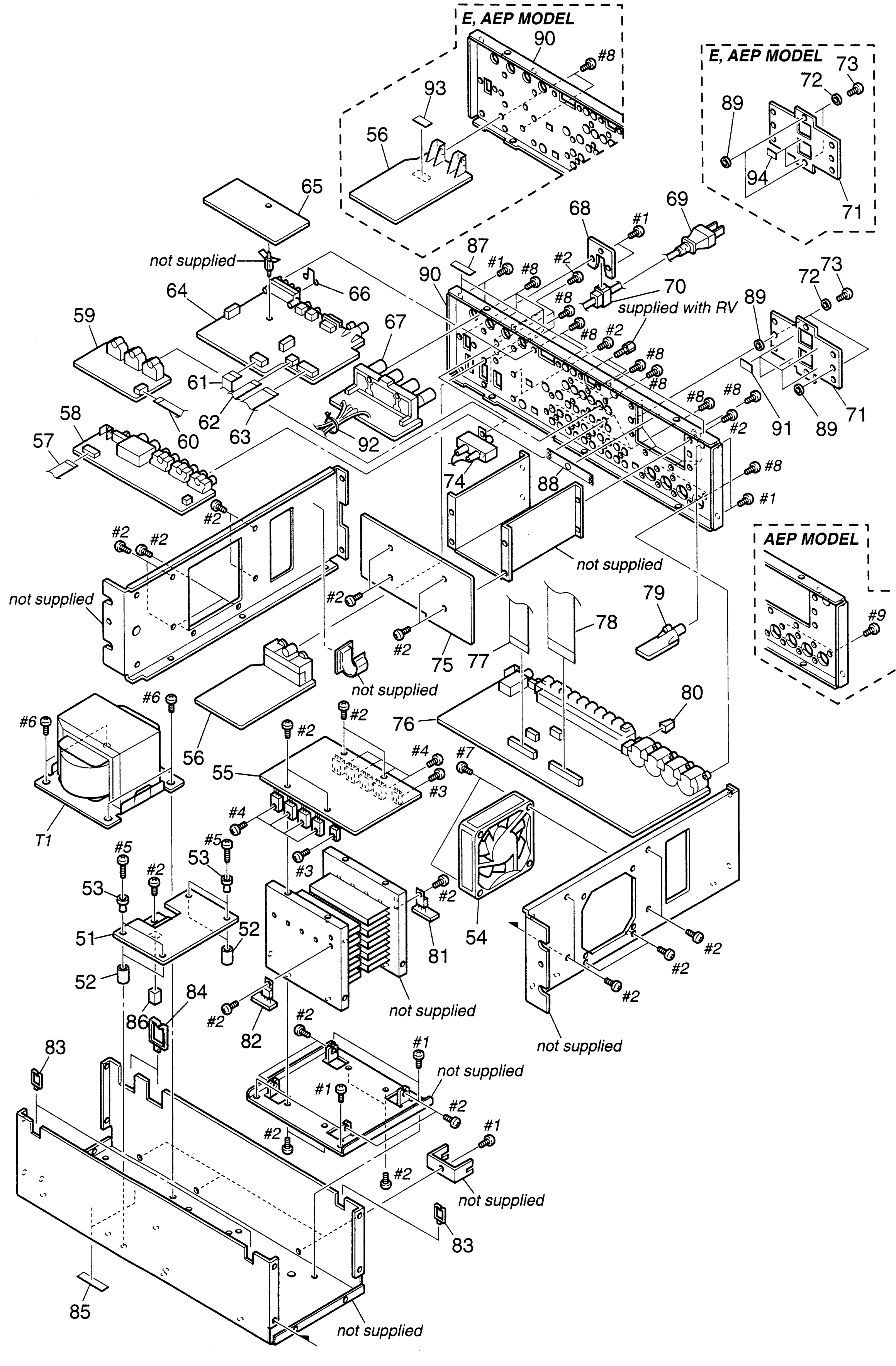
#1
#2
not supplied
supplied with RV

Ref. No.	Part No.	Description	Remarks
1	2-347-103-01	PANEL, FRONT	
2	2-346-905-11	KNOB (DIA.9)	
* 3	A-4591-275-A	LED BOARD, COMPLETE	
4	2-347-108-01	KNOB (DIA.19)	
5	X-2335-569-1	KNOB (R48V) ASSY	
6	4-904-377-21	KNOB, FADER	
7	4-942-568-41	EMBLEM (NO.5), SONY	
* 8	2-346-685-01	WASHER, LED	
9	2-346-775-01	ESCUTCHEON	
10	4-983-652-01	WINDOW (CATCHER)	
11	2-344-100-01	WASHER	
12	4-931-646-01	LENS, LED	
13	4-928-315-31	KEY TOP	
14	4-927-278-31	KEY TOP	
* 15	A-4591-277-A	FADER BOARD, COMPLETE	
16	3-684-465-01	NUT, HEXAGON	
17	2-335-924-22	BUTTON	
* 18	A-4591-260-A	PSW BOARD, COMPLETE	
* 19	2-344-813-11	CASE, UPPER	
20	2-338-688-01	SCREW, STEP TAPPING	
21	3-704-366-01	SCREW (CASE) (M3X8)	
* 22	A-4591-261-A	IR BOARD, COMPLETE	
* 23	A-4591-262-A	MIC4 BOARD, COMPLETE	
24	2-335-454-01	PUSH BUTTON	
* 25	A-4591-264-A	VOL BOARD, COMPLETE	
* 26	A-4591-267-A	MIX BOARD, COMPLETE	
27	1-773-006-11	WIRE (FLAT TYPE) (15 CORE)	
* 28	A-4591-259-A	MASTER BOARD, COMPLETE	
29	2-337-554-01	FOOT	
* 30	A-4591-272-A	IND BOARD, COMPLETE	
* 31	2-347-138-01	SHEET, MICROPHONE GROUND (AEP, E)	
32	3-888-456-01	SPACER	

4-2. CHASSIS SECTION



E, AEP MODEL
E, AEP MODEL
AEP MODEL
not supplied
supplied with RV
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Ref. No.	Part No.	Description	Remarks
* 51	A-4591-268-A	PS1 BOARD, COMPLETE	
* 52	2-346-111-01	COLOR (LOWER)	
* 53	2-346-110-01	COLOR (UPPER)	
54	1-698-890-11	DC FAN (92 SQUARE)	
* 55	A-4591-276-A	PA BOARD, COMPLETE	
* 56	A-4591-269-A	PS2 BOARD, COMPLETE (J)	
* 56	A-4591-280-A	PS2 BOARD, COMPLETE (AEP, E)	
57	1-769-945-11	WIRE (FLAT TYPE) (11 CORE)	
* 58	A-4591-265-A	VIDEO BOARD, COMPLETE	
* 59	A-4591-266-A	S-VIDEO BOARD, COMPLETE	
60	1-769-840-11	WIRE (FLAT TYPE) (5 CORE)	
61	1-769-910-11	WIRE (FLAT TYPE) (9 CORE)	
62	1-769-846-11	WIRE (FLAT TYPE) (5 CORE)	
63	1-769-993-11	WIRE (FLAT TYPE) (13 CORE)	
* 64	A-4591-278-A	CONTROL BOARD, COMPLETE	
* 65	A-4591-279-A	CONTROL2 BOARD, COMPLETE	
66	2-346-983-11	BAR, JOINT	
* 67	A-4591-271-A	SP BOARD, COMPLETE	
* 68	4-923-873-01	BRACKET, CORD STOPPER	
⚠69	1-559-297-71	CODE, POWER (J)	
⚠69	1-559-479-11	CORD, POWER (E)	
⚠69	1-575-953-11	CORD, POWER (AEP)	
70	4-916-783-01	BUSHING, CORD	
* 71	2-347-114-01	LID, TUNER	
* 72	4-812-554-21	WASHER	
* 73	2-344-856-21	SCREW, SPECIAL	
⚠74	1-532-546-51	BREAKER, CIRCUIT (E, J)	
⚠74	1-576-408-11	BREAKER, CIRCUIT (AEP)	
* 75	A-4591-270-A	TUN BOARD, COMPLETE (J)	
* 75	A-4591-287-A	TUN BOARD, COMPLETE (AEP, E)	
* 76	A-4591-258-A	AUDIO BOARD, COMPLETE (E, J)	
* 76	A-4591-288-A	AUDIO BOARD, COMPLETE (AEP)	
77	1-773-261-11	WIRE (FLAT TYPE) (27 CORE)	
78	1-773-415-11	WIRE (FLAT TYPE) (35 CORE)	
* 79	A-4591-263-A	ANT BOARD, COMPLETE	
80	2-346-290-12	KNOB	
* 81	A-4591-274-A	TH2 BOARD, COMPLETE	
* 82	A-4591-273-A	TH1 BOARD, COMPLETE	
* 83	4-708-065-01	HOLDER (EHS-18), EDGE	
85	4-359-697-11	CUSHION (F)	
86	3-718-568-01	CUSHION, ST	
87	3-888-456-01	SPACER	
* 88	2-347-145-01	CUSHION (A)	
89	3-328-432-01	WASHER, STOPPER	
* 90	2-347-105-01	PANEL, BACK (J)	
* 90	2-347-105-11	PANEL, BACK (AEP, E)	
91	2-389-320-01	STOPPER, HARF (J)	
* 92	3-655-653-01	BAND (TAITON), BINDING	
* 93	3-327-547-11	REINFORCEMENT, SPRING (AEP, E)	
* 94	3-338-263-01	CUSHION (U) (AEP, E)	
⚠T1	1-435-234-12	POWER TRANSFORMER (J)	
⚠T1	1-435-277-11	POWER TRANSFORMER (E)	
⚠T1	1-435-278-11	POWER TRANSFORMER (AEP)	

⚠印の部品，または ⚠印付きの点線で囲まれた部品は，
安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

SECTION 5
ELECTRICAL PARTS LIST

【電気部品表】

【使用上の注意】
- ここに記載されている部品は，補修用部品であるため，回路図及びセットに付いている部品と異なる場合があります。
- -XX, -Xは標準化部品のため，セットに付いている部品と異なる場合があります。
- *印の部品は常備在庫しておりません。
- コンデンサの単位でuFはμFを示します。
- 抵抗の単位Ωは省略してあります。
  METAL：金属被膜抵抗。
  METAL OXIDE：酸化金属被膜抵抗。
- インダクタの単位でuHはμHを示します。
- 半導体の名称でuA..., uPA..., uPB..., uPC..., uPD...等はそれぞれμA..., μPA..., μPB..., μPC..., μPD...を示します。

お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定してください。

⚠印の部品，または⚠印付の点線で囲まれた部品は，
安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

Note:

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: μF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA... , uPA...: μPA... ,
  uPB...: μPB... , uPC...: μPC... ,
  uPD...: μPD...

Ref. No.	Part No.	Description			Remarks
*	A-4591-263-A	ANT BOARD, COMPLETE *******************			
		< JACK >			
J1301	1-695-038-11	CONNECTOR ASSY, BNC 1P (ANT IN A)			
**					
*	A-4591-288-A	AUDIO BOARD, COMPLETE (AEP) **********************			
*	A-4591-258-A	AUDIO BOARD, COMPLETE (E, J) **********************			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C001	1-126-940-11	ELECT	330uF	20%	25V
C002	1-126-965-11	ELECT	22uF	20%	50V
C003	1-128-551-11	ELECT	22uF	20%	63V
C004	1-128-551-11	ELECT	22uF	20%	63V
C005	1-126-940-11	ELECT	330uF	20%	25V
C006	1-107-612-11	CERAMIC	100PF	5%	500V
C007	1-107-612-11	CERAMIC	100PF	5%	500V
C008	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C009	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C010	1-126-940-11	ELECT	330uF	20%	25V
C021	1-126-965-11	ELECT	22uF	20%	50V
C022	1-136-165-00	MYLAR	0.1uF	5%	50V
C023	1-136-165-00	MYLAR	0.1uF	5%	50V
C024	1-136-165-00	MYLAR	0.1uF	5%	50V
C025	1-126-965-11	ELECT	22uF	20%	50V
C027	1-136-165-00	MYLAR	0.1uF	5%	50V
C028	1-126-965-11	ELECT	22uF	20%	50V
C029	1-136-165-00	MYLAR	0.1uF	5%	50V
C030	1-136-165-00	MYLAR	0.1uF	5%	50V
C031	1-126-965-11	ELECT	22uF	20%	50V
C041	1-126-940-11	ELECT	330uF	20%	25V
C042	1-126-965-11	ELECT	22uF	20%	50V
C043	1-128-551-11	ELECT	22uF	20%	63V
C044	1-128-551-11	ELECT	22uF	20%	63V
C045	1-126-940-11	ELECT	330uF	20%	25V
C046	1-107-612-11	CERAMIC	100PF	5%	500V
C047	1-107-612-11	CERAMIC	100PF	5%	500V
C048	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C049	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C050	1-126-940-11	ELECT	330uF	20%	25V
C061	1-126-940-11	ELECT	330uF	20%	25V
C062	1-136-165-00	MYLAR	0.1uF	5%	50V
C063	1-136-165-00	MYLAR	0.1uF	5%	50V
C064	1-136-165-00	MYLAR	0.1uF	5%	50V
C065	1-126-965-11	ELECT	22uF	20%	50V
C066	1-128-551-11	ELECT	22uF	20%	63V
C067	1-128-551-11	ELECT	22uF	20%	63V
C068	1-126-940-11	ELECT	330uF	20%	25V
C069	1-107-612-11	CERAMIC	100PF	5%	500V
C070	1-107-612-11	CERAMIC	100PF	5%	500V
C071	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C072	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C073	1-126-940-11	ELECT	330uF	20%	25V
C081	1-126-940-11	ELECT	330uF	20%	25V
C082	1-136-165-00	MYLAR	0.1uF	5%	50V
C083	1-128-551-11	ELECT	22uF	20%	63V
C084	1-136-165-00	MYLAR	0.1uF	5%	50V
C085	1-136-165-00	MYLAR	0.1uF	5%	50V
C086	1-126-965-11	ELECT	22uF	20%	50V
C087	1-128-551-11	ELECT	22uF	20%	63V
C088	1-126-965-11	ELECT	22uF	20%	50V
C089	1-126-965-11	ELECT	22uF	20%	50V
C090	1-126-940-11	ELECT	330uF	20%	25V
C091	1-107-612-11	CERAMIC	100PF	5%	500V
C092	1-107-612-11	CERAMIC	100PF	5%	500V

Ref. No.	Part No.	Description			Remarks
C093	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C094	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C095	1-126-940-11	ELECT	330uF	20%	25V
C101	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C102	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C106	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C107	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C111	1-126-965-11	ELECT	22uF	20%	50V
C112	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C113	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C114	1-126-965-11	ELECT	22uF	20%	50V
C115	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C116	1-126-965-11	ELECT	22uF	20%	50V
C117	1-126-965-11	ELECT	22uF	20%	50V
C118	1-126-965-11	ELECT	22uF	20%	50V
C119	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C120	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C121	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C122	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C123	1-126-965-11	ELECT	22uF	20%	50V
C124	1-126-965-11	ELECT	22uF	20%	50V
C125	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C126	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C127	1-126-965-11	ELECT	22uF	20%	50V
C128	1-126-965-11	ELECT	22uF	20%	50V
C129	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C130	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C131	1-126-965-11	ELECT	22uF	20%	50V
C141	1-126-965-11	ELECT	22uF	20%	50V
C142	1-126-965-11	ELECT	22uF	20%	50V
C143	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C144	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C151	1-126-965-11	ELECT	22uF	20%	50V
C152	1-126-965-11	ELECT	22uF	20%	50V
C161	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C162	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C171	1-126-965-11	ELECT	22uF	20%	50V
C172	1-126-965-11	ELECT	22uF	20%	50V
C181	1-126-965-11	ELECT	22uF	20%	50V
C183	1-126-965-11	ELECT	22uF	20%	50V
C184	1-126-965-11	ELECT	22uF	20%	50V
C185	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C186	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C192	1-126-940-11	ELECT	330uF	20%	25V
C193	1-126-965-11	ELECT	22uF	20%	50V
C194	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C195	1-126-940-11	ELECT	330uF	20%	25V
C196	1-126-965-11	ELECT	22uF	20%	50V
C197	1-126-967-11	ELECT	47uF	20%	50V
C198	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C199	1-126-965-11	ELECT	22uF	20%	50V
C200	1-126-965-11	ELECT	22uF	20%	50V
C201	1-126-967-11	ELECT	47uF	20%	50V
C202	1-126-939-11	ELECT	10000uF	20%	16V
C204	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C206	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C208	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C210	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C211	1-126-940-11	ELECT	330uF	20%	25V
C212	1-126-940-11	ELECT	330uF	20%	25V
C213	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	
CN001	1-569-340-11	CONNECTOR, BOARD TO BOARD 11P	
CN002	1-794-099-11	CONNECTOR, ROUND TYPE (MIC 1) (AEP)	
CN002	1-778-327-21	CONNECTOR (RECEPTACLE) (MIC 1) (E, J)	
CN004	1-691-769-11	PLUG (MICRO CONNECTOR) 7P	
CN005	1-794-099-11	CONNECTOR, ROUND TYPE (MIC 2) (AEP)	
CN005	1-778-327-21	CONNECTOR (RECEPTACLE) (MIC 2) (E,J)	
CN006	1-794-099-11	CONNECTOR, ROUND TYPE (MIC 3) (AEP)	
CN006	1-778-327-21	CONNECTOR (RECEPTACLE) (MIC 3) (E,J)	
* CN007	1-691-958-11	SOCKET, CONNECTOR 35P	
CN008	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
CN009	1-794-099-11	CONNECTOR, ROUND TYPE (MIC 4) (AEP)	
CN009	1-778-327-21	CONNECTOR (RECEPTACLE) (MIC 4) (E, J)	
* CN010	1-568-842-11	SOCKET, CONNECTOR 27P	
* CN011	1-568-830-11	SOCKET, CONNECTOR 11P	
* CN012	1-568-828-11	SOCKET, CONNECTOR 9P	
CN013	1-537-865-11	TERMINAL (M3)	
		< DIODE >	
D001	8-719-017-91	DIODE MA8160-TX	
D002	8-719-017-91	DIODE MA8160-TX	
D003	8-719-017-91	DIODE MA8160-TX	
D004	8-719-017-91	DIODE MA8160-TX	
D011	8-719-017-91	DIODE MA8160-TX	
D012	8-719-017-91	DIODE MA8160-TX	
D013	8-719-017-91	DIODE MA8160-TX	
D014	8-719-017-91	DIODE MA8160-TX	
D021	8-719-017-91	DIODE MA8160-TX	
D022	8-719-017-91	DIODE MA8160-TX	
D023	8-719-017-91	DIODE MA8160-TX	
D024	8-719-017-91	DIODE MA8160-TX	
D031	8-719-017-91	DIODE MA8160-TX	
D032	8-719-017-91	DIODE MA8160-TX	
D033	8-719-017-91	DIODE MA8160-TX	
D034	8-719-017-91	DIODE MA8160-TX	
D041	8-719-017-91	DIODE MA8160-TX	
D042	8-719-017-91	DIODE MA8160-TX	
D043	8-719-017-91	DIODE MA8160-TX	
D044	8-719-017-91	DIODE MA8160-TX	
D051	8-719-017-91	DIODE MA8160-TX	
D052	8-719-017-91	DIODE MA8160-TX	
D053	8-719-017-91	DIODE MA8160-TX	
D054	8-719-017-91	DIODE MA8160-TX	
D061	8-719-017-91	DIODE MA8160-TX	
D062	8-719-017-91	DIODE MA8160-TX	
D063	8-719-017-91	DIODE MA8160-TX	
D064	8-719-017-91	DIODE MA8160-TX	
D065	8-719-017-91	DIODE MA8160-TX	
D066	8-719-017-91	DIODE MA8160-TX	
D067	8-719-017-91	DIODE MA8160-TX	
D068	8-719-017-91	DIODE MA8160-TX	
D069	8-719-017-91	DIODE MA8160-TX	
D070	8-719-017-91	DIODE MA8160-TX	
D071	8-719-017-91	DIODE MA8160-TX	
D072	8-719-017-91	DIODE MA8160-TX	
D073	8-719-017-91	DIODE MA8160-TX	
D074	8-719-017-91	DIODE MA8160-TX	
D075	8-719-017-91	DIODE MA8160-TX	
D076	8-719-017-91	DIODE MA8160-TX	

AUDIO

Ref. No.	Part No.	Description	Remarks
D081	8-719-017-91	DIODE MA8160-TX	
D082	8-719-017-91	DIODE MA8160-TX	
D083	8-719-017-91	DIODE MA8160-TX	
D084	8-719-017-91	DIODE MA8160-TX	
D091	8-719-017-91	DIODE MA8160-TX	
D092	8-719-017-91	DIODE MA8160-TX	
D093	8-719-017-91	DIODE MA8160-TX	
D094	8-719-017-91	DIODE MA8160-TX	
D101	8-719-017-91	DIODE MA8160-TX	
D102	8-719-017-91	DIODE MA8160-TX	
D103	8-719-017-91	DIODE MA8160-TX	
D104	8-719-017-91	DIODE MA8160-TX	
D111	8-719-017-91	DIODE MA8160-TX	
D112	8-719-017-91	DIODE MA8160-TX	
D113	8-719-017-91	DIODE MA8160-TX	
D114	8-719-017-91	DIODE MA8160-TX	
D121	8-719-017-91	DIODE MA8160-TX	
D122	8-719-017-91	DIODE MA8160-TX	
D123	8-719-017-91	DIODE MA8160-TX	
D124	8-719-017-91	DIODE MA8160-TX	
D130	8-719-988-61	DIODE 1SS355TE-17	
D131	8-719-988-61	DIODE 1SS355TE-17	
D132	8-719-988-61	DIODE 1SS355TE-17	
D133	8-719-401-23	DIODE MA3220H-TX	
D134	8-719-988-61	DIODE 1SS355TE-17	
D135	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC001	8-759-711-85	IC NJM4580E-D-TE2	
IC002	8-759-711-85	IC NJM4580E-D-TE2	
IC003	8-759-801-01	IC LC4966	
IC004	8-759-711-85	IC NJM4580E-D-TE2	
IC005	8-759-711-85	IC NJM4580E-D-TE2	
IC006	8-759-711-85	IC NJM4580E-D-TE2	
IC007	8-759-711-85	IC NJM4580E-D-TE2	
IC008	8-759-802-52	IC LC7818	
IC009	8-759-711-85	IC NJM4580E-D-TE2	
IC010	8-759-711-85	IC NJM4580E-D-TE2	
IC011	8-759-711-85	IC NJM4580E-D-TE2	
IC012	8-759-711-85	IC NJM4580E-D-TE2	
IC013	8-759-982-15	IC NJM7815FA	
IC014	8-759-701-89	IC NJM7915FA	
IC015	8-759-701-75	IC NJM7805FA	
IC016	8-759-390-51	IC uPC2409AHF	
		< JACK >	
J001	1-784-429-11	JACK, PIN 4P (ST1/ST2)	
J002	1-784-429-11	JACK, PIN 4P (ST3)	
J003	1-784-429-11	JACK, PIN 4P (ST3)	
J004	1-784-429-11	JACK, PIN 4P (MASTER/REC)	
J005	1-770-272-11	JACK, PIN 2P (RETURN)	
J006	1-774-819-11	JACK, PIN 2P (SEND)	
J007	1-507-854-00	JACK, PHONE (INSERT)	
		< JUMPER RESISTOR >	
JC001	1-216-295-91	SHORT 0	
JC002	1-216-295-91	SHORT 0	
JC003	1-216-295-91	SHORT 0	
JC004	1-216-295-91	SHORT 0	
JC005	1-216-295-91	SHORT 0	
JC006	1-216-295-91	SHORT 0	
JC007	1-216-295-91	SHORT 0	
JC008	1-216-295-91	SHORT 0	
JC009	1-216-295-91	SHORT 0	
JC010	1-216-295-91	SHORT 0	
JC011	1-216-295-91	SHORT 0	
JC012	1-216-295-91	SHORT 0	
JC013	1-216-295-91	SHORT 0	
JC014	1-216-295-91	SHORT 0	
		< COIL >	
L001	1-410-993-22	INDUCTOR CHIP 1uH	
L002	1-410-993-22	INDUCTOR CHIP 1uH	
L011	1-410-993-22	INDUCTOR CHIP 1uH	
L012	1-410-993-22	INDUCTOR CHIP 1uH	
L021	1-410-993-22	INDUCTOR CHIP 1uH	
L022	1-410-993-22	INDUCTOR CHIP 1uH	
L031	1-410-993-22	INDUCTOR CHIP 1uH	
L032	1-410-993-22	INDUCTOR CHIP 1uH	
L041	1-410-993-22	INDUCTOR CHIP 1uH	
		< TRANSISTOR >	
Q001	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q002	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q011	8-729-424-08	TRANSISTOR UN2111-TX	
Q012	8-729-421-22	TRANSISTOR UN2211-TX	
Q013	8-729-421-22	TRANSISTOR UN2211-TX	
Q014	8-729-424-08	TRANSISTOR UN2111-TX	
Q015	8-729-421-22	TRANSISTOR UN2211-TX	
Q016	8-729-421-22	TRANSISTOR UN2211-TX	
Q021	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q022	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q031	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q032	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q041	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q042	8-729-354-52	TRANSISTOR 2SC2545-ETZ	
Q051	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q052	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q053	8-729-424-08	TRANSISTOR UN2111-TX	
Q054	8-729-421-22	TRANSISTOR UN2211-TX	
Q061	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q062	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q071	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q072	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q081	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q082	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q083	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q084	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q091	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q101	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q102	8-729-424-08	TRANSISTOR UN2111-TX	
Q103	8-729-421-22	TRANSISTOR UN2211-TX	
Q104	8-729-421-22	TRANSISTOR UN2211-TX	
Q111	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q112	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q113	8-729-424-08	TRANSISTOR UN2111-TX	
Q114	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q115	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q116	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	
Q117	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-AB	

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
R001	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R002	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R004	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R005	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R006	1-216-001-00	METAL CHIP	10	5%	1/10W
R007	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R008	1-216-073-00	METAL CHIP	10K	5%	1/10W
R009	1-216-001-00	METAL CHIP	10	5%	1/10W
R010	1-216-029-00	METAL CHIP	150	5%	1/10W
R011	1-216-073-00	METAL CHIP	10K	5%	1/10W
R012	1-216-089-91	RES-CHIP	47K	5%	1/10W
R013	1-216-089-91	RES-CHIP	47K	5%	1/10W
R014	1-216-073-00	METAL CHIP	10K	5%	1/10W
R015	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R016	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R020	1-216-073-00	METAL CHIP	10K	5%	1/10W
R021	1-216-073-00	METAL CHIP	10K	5%	1/10W
R023	1-216-073-00	METAL CHIP	10K	5%	1/10W
R024	1-216-049-91	RES-CHIP	1K	5%	1/10W
R025	1-216-089-91	RES-CHIP	47K	5%	1/10W
R026	1-216-073-00	METAL CHIP	10K	5%	1/10W
R027	1-216-081-00	METAL CHIP	22K	5%	1/10W
R028	1-216-097-91	RES-CHIP	100K	5%	1/10W
R029	1-216-089-91	RES-CHIP	47K	5%	1/10W
R030	1-216-097-91	RES-CHIP	100K	5%	1/10W
R031	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R032	1-216-089-91	RES-CHIP	47K	5%	1/10W
R033	1-216-049-91	RES-CHIP	1K	5%	1/10W
R034	1-216-073-00	METAL CHIP	10K	5%	1/10W
R035	1-216-089-91	RES-CHIP	47K	5%	1/10W
R036	1-216-097-91	RES-CHIP	100K	5%	1/10W
R037	1-216-081-00	METAL CHIP	22K	5%	1/10W
R038	1-216-097-91	RES-CHIP	100K	5%	1/10W
R039	1-216-073-00	METAL CHIP	10K	5%	1/10W
R040	1-216-073-00	METAL CHIP	10K	5%	1/10W
R041	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R042	1-216-073-00	METAL CHIP	10K	5%	1/10W
R051	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R052	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R054	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R055	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R056	1-216-001-00	METAL CHIP	10	5%	1/10W
R057	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R058	1-216-073-00	METAL CHIP	10K	5%	1/10W
R059	1-216-001-00	METAL CHIP	10	5%	1/10W
R060	1-216-029-00	METAL CHIP	150	5%	1/10W
R061	1-216-073-00	METAL CHIP	10K	5%	1/10W
R062	1-216-089-91	RES-CHIP	47K	5%	1/10W
R063	1-216-089-91	RES-CHIP	47K	5%	1/10W
R064	1-216-073-00	METAL CHIP	10K	5%	1/10W
R065	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R066	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R071	1-216-089-91	RES-CHIP	47K	5%	1/10W
R072	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R073	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R075	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R076	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R077	1-216-097-91	RES-CHIP	100K	5%	1/10W
R078	1-216-001-00	METAL CHIP	10	5%	1/10W
R079	1-216-089-91	RES-CHIP	47K	5%	1/10W
R080	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R081	1-216-001-00	METAL CHIP	10	5%	1/10W
R082	1-216-029-00	METAL CHIP	150	5%	1/10W
R083	1-216-073-00	METAL CHIP	10K	5%	1/10W
R084	1-216-089-91	RES-CHIP	47K	5%	1/10W
R085	1-216-089-91	RES-CHIP	47K	5%	1/10W
R086	1-216-073-00	METAL CHIP	10K	5%	1/10W
R087	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R088	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R091	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R092	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R093	1-216-089-91	RES-CHIP	47K	5%	1/10W
R094	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R095	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R097	1-216-001-00	METAL CHIP	10	5%	1/10W
R098	1-216-089-91	RES-CHIP	47K	5%	1/10W
R099	1-216-097-91	RES-CHIP	100K	5%	1/10W
R100	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R101	1-216-001-00	METAL CHIP	10	5%	1/10W
R102	1-216-029-00	METAL CHIP	150	5%	1/10W
R103	1-216-073-00	METAL CHIP	10K	5%	1/10W
R104	1-216-097-91	RES-CHIP	100K	5%	1/10W
R105	1-216-097-91	RES-CHIP	100K	5%	1/10W
R106	1-216-089-91	RES-CHIP	47K	5%	1/10W
R107	1-216-089-91	RES-CHIP	47K	5%	1/10W
R108	1-216-073-00	METAL CHIP	10K	5%	1/10W
R109	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R110	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R121	1-216-025-91	RES-CHIP	100	5%	1/10W
R122	1-216-089-91	RES-CHIP	47K	5%	1/10W
R123	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R124	1-216-089-91	RES-CHIP	47K	5%	1/10W
R125	1-216-097-91	RES-CHIP	100K	5%	1/10W
R126	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R127	1-216-089-91	RES-CHIP	47K	5%	1/10W
R128	1-216-025-91	RES-CHIP	100	5%	1/10W
R129	1-216-089-91	RES-CHIP	47K	5%	1/10W
R130	1-216-073-00	METAL CHIP	10K	5%	1/10W
R131	1-216-097-91	RES-CHIP	100K	5%	1/10W
R132	1-216-073-00	METAL CHIP	10K	5%	1/10W
R133	1-216-025-91	RES-CHIP	100	5%	1/10W
R134	1-216-073-00	METAL CHIP	10K	5%	1/10W
R135	1-216-073-00	METAL CHIP	10K	5%	1/10W
R136	1-216-089-91	RES-CHIP	47K	5%	1/10W
R137	1-216-073-00	METAL CHIP	10K	5%	1/10W
R138	1-216-089-91	RES-CHIP	47K	5%	1/10W
R139	1-216-025-91	RES-CHIP	100	5%	1/10W
R140	1-216-073-00	METAL CHIP	10K	5%	1/10W
R141	1-216-025-91	RES-CHIP	100	5%	1/10W
R142	1-216-089-91	RES-CHIP	47K	5%	1/10W
R143	1-216-089-91	RES-CHIP	47K	5%	1/10W
R144	1-216-089-91	RES-CHIP	47K	5%	1/10W
R145	1-216-025-91	RES-CHIP	100	5%	1/10W
R146	1-216-025-91	RES-CHIP	100	5%	1/10W
R147	1-216-089-91	RES-CHIP	47K	5%	1/10W
R148	1-216-089-91	RES-CHIP	47K	5%	1/10W
R149	1-216-025-91	RES-CHIP	100	5%	1/10W
R150	1-216-049-91	RES-CHIP	1K	5%	1/10W
R151	1-216-049-91	RES-CHIP	1K	5%	1/10W
R152	1-216-049-91	RES-CHIP	1K	5%	1/10W

AUDIO CONTROL

Ref. No.	Part No.	Description			Remarks
R153	1-216-049-91	RES-CHIP	1K	5%	1/10W
R161	1-216-079-00	METAL CHIP	18K	5%	1/10W
R162	1-216-041-00	METAL CHIP	470	5%	1/10W
R163	1-216-079-00	METAL CHIP	18K	5%	1/10W
R164	1-216-097-91	RES-CHIP	100K	5%	1/10W
R165	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R166	1-216-073-00	METAL CHIP	10K	5%	1/10W
R167	1-216-073-00	METAL CHIP	10K	5%	1/10W
R168	1-216-073-00	METAL CHIP	10K	5%	1/10W
R169	1-216-073-00	METAL CHIP	10K	5%	1/10W
R170	1-216-097-91	RES-CHIP	100K	5%	1/10W
R171	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R172	1-216-079-00	METAL CHIP	18K	5%	1/10W
R173	1-216-079-00	METAL CHIP	18K	5%	1/10W
R174	1-216-041-00	METAL CHIP	470	5%	1/10W
R181	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R182	1-216-041-00	METAL CHIP	470	5%	1/10W
R183	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R184	1-216-097-91	RES-CHIP	100K	5%	1/10W
R185	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R186	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R187	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R188	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R189	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R190	1-216-097-91	RES-CHIP	100K	5%	1/10W
R191	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R192	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R193	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R194	1-216-041-00	METAL CHIP	470	5%	1/10W
R201	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R202	1-216-033-00	METAL CHIP	220	5%	1/10W
R203	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R204	1-216-097-91	RES-CHIP	100K	5%	1/10W
R205	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R206	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R207	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R208	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R209	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R210	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R211	1-216-097-91	RES-CHIP	100K	5%	1/10W
R212	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R213	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R214	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R215	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R216	1-216-033-00	METAL CHIP	220	5%	1/10W
R221	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R222	1-216-041-00	METAL CHIP	470	5%	1/10W
R223	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R224	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R225	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R226	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R227	1-216-073-00	METAL CHIP	10K	5%	1/10W
R228	1-216-025-91	RES-CHIP	100	5%	1/10W
R229	1-216-081-00	METAL CHIP	22K	5%	1/10W
R230	1-216-073-00	METAL CHIP	10K	5%	1/10W
R231	1-216-097-91	RES-CHIP	100K	5%	1/10W
R232	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R238	1-216-041-00	METAL CHIP	470	5%	1/10W
R239	1-216-041-00	METAL CHIP	470	5%	1/10W
R241	1-216-073-00	METAL CHIP	10K	5%	1/10W
R242	1-216-073-00	METAL CHIP	10K	5%	1/10W
R243	1-216-025-91	RES-CHIP	100	5%	1/10W
R244	1-216-049-91	RES-CHIP	1K	5%	1/10W
R246	1-216-089-91	RES-CHIP	47K	5%	1/10W
R251	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R252	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R253	1-216-073-00	METAL CHIP	10K	5%	1/10W
R254	1-216-017-91	RES-CHIP	47	5%	1/10W
R255	1-216-017-91	RES-CHIP	47	5%	1/10W
R256	1-216-041-00	METAL CHIP	470	5%	1/10W
R257	1-216-041-00	METAL CHIP	470	5%	1/10W
R258	1-216-041-00	METAL CHIP	470	5%	1/10W
R259	1-216-041-00	METAL CHIP	470	5%	1/10W
R260	1-216-033-00	METAL CHIP	220	5%	1/10W
R261	1-216-033-00	METAL CHIP	220	5%	1/10W
R262	1-216-033-00	METAL CHIP	220	5%	1/10W
R263	1-216-033-00	METAL CHIP	220	5%	1/10W
R264	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R265	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R266	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R267	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R268	1-216-033-00	METAL CHIP	220	5%	1/10W
R269	1-216-033-00	METAL CHIP	220	5%	1/10W
⚠R270	1-217-639-00	FUSIBLE	2.2	5%	1/4W
		< SWITCH >			
S001	1-692-485-11	SWITCH, PUSH (1 KEY) (+48V)			
S002	1-570-707-21	SWITCH, SLIDE (ASSIGN)			

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*	A-4591-278-A	CONTROL BOARD, COMPLETE ***********************			
		< CAPACITOR >			
C1001	1-124-261-00	ELECT	10uF	20%	50V
C1002	1-124-261-00	ELECT	10uF	20%	50V
C1003	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1004	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1005	1-124-261-00	ELECT	10uF	20%	50V
C1006	1-124-261-00	ELECT	10uF	20%	50V
C1007	1-124-261-00	ELECT	10uF	20%	50V
C1008	1-124-261-00	ELECT	10uF	20%	50V
C1009	1-124-261-00	ELECT	10uF	20%	50V
C1010	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1011	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1012	1-126-176-11	ELECT	220uF	20%	10V
C1013	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1014	1-126-176-11	ELECT	220uF	20%	10V
C1015	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1016	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1017	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1018	1-124-465-00	ELECT	0.47uF	20%	50V
C1019	1-125-507-11	DOUBLE LAYER	0.22F	0%	5.5V
C1020	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V

⚠印の部品，または ⚠印付きの点線で囲まれた部品は，
安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

The components identified by mark ⚠ or dotted
line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks
C1021	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C1022	1-124-261-00	ELECT 10uF 20%	50V
C1023	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C1024	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C1025	1-107-612-11	CERAMIC 100PF 5%	500V
C1027	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C1028	1-124-261-00	ELECT 10uF 20%	50V
C1029	1-104-665-11	ELECT 100uF 20%	25V
C1030	1-164-346-11	CERAMIC CHIP 1uF 0%	16V
C1031	1-164-346-11	CERAMIC CHIP 1uF 0%	16V
C1032	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C1033	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
		< CONNECTOR >	
* CN1001	1-564-518-11	PLUG, CONNECTOR 3P	
CN1002	1-568-856-11	SOCKET, CONNECTOR 13P	
CN1003	1-764-116-51	PULG, (D) SUB CONNECTOR 9P (RS-232C)	
* CN1004	1-568-852-11	SOCKET, CONNECTOR 9P	
* CN1005	1-568-848-11	SOCKET, CONNECTOR 5P	
CN1006	1-694-335-11	TERMINAL BOARD (EMG)	
CN1008	1-560-944-00	PIN, CONNECTOR 7P	
CN1009	1-508-693-00	CONNECTOR PIN 10P	
		< DIODE >	
D1001	8-719-988-61	DIODE 1SS355TE-17	
D1002	8-719-988-61	DIODE 1SS355TE-17	
D1003	8-719-988-61	DIODE 1SS355TE-17	
D1004	8-719-988-61	DIODE 1SS355TE-17	
D1005	8-719-988-61	DIODE 1SS355TE-17	
D1006	8-719-988-61	DIODE 1SS355TE-17	
D1007	8-719-988-61	DIODE 1SS355TE-17	
D1008	8-719-988-61	DIODE 1SS355TE-17	
D1009	8-719-988-61	DIODE 1SS355TE-17	
D1010	8-719-017-91	DIODE MA8160-TX	
D1011	8-719-017-91	DIODE MA8160-TX	
D1012	8-719-017-91	DIODE MA8160-TX	
D1013	8-719-017-91	DIODE MA8160-TX	
D1014	8-719-017-91	DIODE MA8160-TX	
D1015	8-719-017-91	DIODE MA8160-TX	
D1016	8-719-017-91	DIODE MA8160-TX	
D1017	8-719-017-91	DIODE MA8160-TX	
D1018	8-719-017-91	DIODE MA8160-TX	
D1019	8-719-017-91	DIODE MA8160-TX	
D1020	8-719-017-91	DIODE MA8160-TX	
D1021	8-719-017-91	DIODE MA8160-TX	
D1022	8-719-988-61	DIODE 1SS355TE-17	
D1023	8-719-988-61	DIODE 1SS355TE-17	
D1024	8-719-422-46	DIODE MA8056-TX	
D1025	8-719-988-61	DIODE 1SS355TE-17	
D1026	8-719-988-61	DIODE 1SS355TE-17	
D1027	8-719-988-61	DIODE 1SS355TE-17	
D1028	8-719-988-61	DIODE 1SS355TE-17	
D1029	8-719-422-46	DIODE MA8056-TX	
D1030	8-719-988-61	DIODE 1SS355TE-17	
D1031	8-719-988-61	DIODE 1SS355TE-17	
D1032	8-719-988-61	DIODE 1SS355TE-17	
D1033	8-719-988-61	DIODE 1SS355TE-17	
D1034	8-719-988-61	DIODE 1SS355TE-17	
D1035	8-719-988-61	DIODE 1SS355TE-17	
D1036	8-719-988-61	DIODE 1SS355TE-17	
D1037	8-719-988-61	DIODE 1SS355TE-17	
D1038	8-719-988-61	DIODE 1SS355TE-17	
D1039	8-719-988-61	DIODE 1SS355TE-17	
D1040	8-719-988-61	DIODE 1SS355TE-17	
D1041	8-719-988-61	DIODE 1SS355TE-17	
D1043	8-719-988-61	DIODE 1SS355TE-17	
D1044	8-719-988-61	DIODE 1SS355TE-17	
D1045	8-719-988-61	DIODE 1SS355TE-17	
D1046	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC1001	8-759-605-16	IC M51953BL	
IC1002	8-759-434-33	IC M37471M2-472SP	
IC1003	8-759-432-82	IC uPD78P054GC-067-3B9	
IC1004	8-759-972-58	IC MAX238CNG	
IC1005	8-759-926-14	IC TC74HC148AF-TP1	
IC1006	8-759-165-80	IC PST600C-T	
IC1007	8-759-605-16	IC M51953BL	
IC1008	8-759-236-11	IC TC74HC138AF (EL)	
IC1009	8-759-390-72	IC TC4S584F (TE85R)	
IC1010	8-759-390-72	IC TC4S584F (TE85R)	
		< JACK >	
J1001	1-793-077-11	JACK (DIA. 3.5) (IN)	
J1002	1-766-728-11	JACK (DIA. 3.5) (OUT)	
J1003	1-695-038-11	CONNECTOR ASSY, BNC 1P (ANT IN B)	
		< JUMPER RESISTOR >	
JC1001	1-216-296-91	SHORT 0	
JC1002	1-216-295-91	SHORT 0	
JC1003	1-216-296-91	SHORT 0	
JC1004	1-216-296-91	SHORT 0	
JC1005	1-216-295-91	SHORT 0	
JC1006	1-216-295-91	SHORT 0	
JC1008	1-216-296-91	SHORT 0	
JC1009	1-216-296-91	SHORT 0	
JC1012	1-216-295-91	SHORT 0	
JC1014	1-216-296-91	SHORT 0	
JC1015	1-216-295-91	SHORT 0	
JC1016	1-216-295-91	SHORT 0	
JC1017	1-216-295-91	SHORT 0	
JC1018	1-216-296-91	SHORT 0	
JC1019	1-216-296-91	SHORT 0	
JC1020	1-216-296-91	SHORT 0	
JC1021	1-216-295-91	SHORT 0	
		< PHOTO INTERRUPTER >	
PH1001	8-719-026-07	PHOTO COUPLER PS2505-1	
		< TRANSISTOR >	
Q1001	8-729-421-22	TRANSISTOR UN2211-TX	
Q1002	8-729-424-08	TRANSISTOR UN2111-TX	
Q1003	8-729-421-22	TRANSISTOR UN2211-TX	
Q1004	8-729-421-22	TRANSISTOR UN2211-TX	
Q1005	8-729-421-22	TRANSISTOR UN2211-TX	
Q1006	8-729-421-22	TRANSISTOR UN2211-TX	
Q1007	8-729-421-22	TRANSISTOR UN2211-TX	
Q1008	8-729-421-22	TRANSISTOR UN2211-TX	
Q1009	8-729-421-22	TRANSISTOR UN2211-TX	
Q1010	8-729-421-22	TRANSISTOR UN2211-TX	

CONTROL CONTROL2

Ref. No.	Part No.	Description			Remarks
Q1011	8-729-421-22	TRANSISTOR UN2211-TX			
Q1012	8-729-421-22	TRANSISTOR UN2211-TX			
Q1013	8-729-421-22	TRANSISTOR UN2211-TX			
Q1014	8-729-421-22	TRANSISTOR UN2211-TX			
Q1015	8-729-421-22	TRANSISTOR UN2211-TX			
Q1016	8-729-421-22	TRANSISTOR UN2211-TX			
Q1017	8-729-424-08	TRANSISTOR UN2111-TX			
Q1018	8-729-421-22	TRANSISTOR UN2211-TX			
Q1019	8-729-421-22	TRANSISTOR UN2211-TX			
Q1020	8-729-421-22	TRANSISTOR UN2211-TX			
Q1021	8-729-421-22	TRANSISTOR UN2211-TX			
Q1022	8-729-421-22	TRANSISTOR UN2211-TX			
Q1023	8-729-421-22	TRANSISTOR UN2211-TX			
Q1024	8-729-421-22	TRANSISTOR UN2211-TX			
Q1025	8-729-421-22	TRANSISTOR UN2211-TX			
Q1026	8-729-421-22	TRANSISTOR UN2211-TX			
Q1027	8-729-421-22	TRANSISTOR UN2211-TX			
Q1028	8-729-424-08	TRANSISTOR UN2111-TX			
		< RESISTOR >			
R1001	1-216-025-91	RES-CHIP	100	5%	1/10W
R1002	1-216-025-91	RES-CHIP	100	5%	1/10W
R1003	1-216-025-91	RES-CHIP	100	5%	1/10W
R1004	1-216-025-91	RES-CHIP	100	5%	1/10W
R1005	1-216-025-91	RES-CHIP	100	5%	1/10W
R1006	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1007	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1008	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1009	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1010	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1011	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1012	1-216-025-91	RES-CHIP	100	5%	1/10W
R1013	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1014	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1015	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1016	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1017	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1018	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1019	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1020	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1021	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1022	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1023	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1024	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1025	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1026	1-216-025-91	RES-CHIP	100	5%	1/10W
R1028	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1029	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1030	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1031	1-216-121-91	RES-CHIP	1M	5%	1/10W
R1032	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1033	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1034	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1035	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1036	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1037	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1038	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1039	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1040	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1041	1-216-089-91	RES-CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R1042	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1043	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1044	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1045	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1046	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1047	1-216-025-91	RES-CHIP	100	5%	1/10W
R1048	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1050	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1051	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1054	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1055	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1056	1-216-047-91	RES-CHIP	820	5%	1/10W
R1057	1-216-041-00	METAL CHIP	470	5%	1/10W
R1058	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1059	1-216-047-91	RES-CHIP	820	5%	1/10W
R1060	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1061	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1062	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1063	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1064	1-216-025-91	RES-CHIP	100	5%	1/10W
R1065	1-216-001-00	METAL CHIP	10	5%	1/10W
R1066	1-249-423-11	CARBON	3.3K	5%	1/4W F
R1067	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1068	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1069	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1070	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1071	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1073	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R1074	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R1075	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1076	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1077	1-216-105-91	RES-CHIP	220K	5%	1/10W
		< VIBRATOR >			
X1001	1-577-082-11	VIBRATOR, CERAMIC (4MHz)			
X1002	1-579-125-11	VIBRATOR, CERAMIC (8MHz)			

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*	A-4591-279-A	CONTROL2 BOARD, COMPLETE **********************			
		< CAPACITOR >			
C2501	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2502	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2503	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2504	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C2505	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C2506	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C2507	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C2508	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C2509	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2510	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2511	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2512	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2513	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C2514	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2515	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2516	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2517	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2518	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2519	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C2520	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V

Ref. No.	Part No.	Description			Remarks
		< CONNECTOR >			
* CN2501	1-569-795-11	HOUSING, CONNECTOR 10P			
* CN2502	1-580-803-11	HOUSING, CONNECTOR 7P			
		< DIODE >			
D2501	8-719-988-61	DIODE 1SS355TE-17			
D2502	8-719-988-61	DIODE 1SS355TE-17			
D2503	8-719-988-61	DIODE 1SS355TE-17			
D2504	8-719-988-61	DIODE 1SS355TE-17			
D2505	8-719-988-61	DIODE 1SS355TE-17			
D2506	8-719-988-61	DIODE 1SS355TE-17			
D2507	8-719-988-61	DIODE 1SS355TE-17			
D2508	8-719-988-61	DIODE 1SS355TE-17			
D2509	8-719-988-61	DIODE 1SS355TE-17			
D2510	8-719-988-61	DIODE 1SS355TE-17			
D2511	8-719-988-61	DIODE 1SS355TE-17			
D2512	8-719-988-61	DIODE 1SS355TE-17			
D2513	8-719-988-61	DIODE 1SS355TE-17			
D2514	8-719-988-61	DIODE 1SS355TE-17			
D2515	8-719-988-61	DIODE 1SS355TE-17			
D2516	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC2501	8-759-235-31	IC TC74HC14AF (EL)			
IC2502	8-759-235-31	IC TC74HC14AF (EL)			
IC2503	8-759-390-72	IC TC4S584F (TE85R)			
IC2504	8-759-235-19	IC TC74HC08AF (EL)			
IC2505	8-759-235-19	IC TC74HC08AF (EL)			
IC2506	8-759-390-72	IC TC4S584F (TE85R)			
		< JUMPER RESISTOR >			
JC2501	1-216-295-91	SHORT	0		
JC2502	1-216-295-91	SHORT	0		
JC2503	1-216-295-91	SHORT	0		
JC2504	1-216-296-91	SHORT	0		
JC2505	1-216-296-91	SHORT	0		
JC2506	1-216-296-91	SHORT	0		
JC2507	1-216-296-91	SHORT	0		
JC2508	1-216-296-91	SHORT	0		
		< TRANSISTOR >			
Q2501	8-729-421-22	TRANSISTOR UN2211-TX			
Q2502	8-729-421-22	TRANSISTOR UN2211-TX			
Q2504	8-729-421-22	TRANSISTOR UN2211-TX			
Q2505	8-729-424-08	TRANSISTOR UN2111-TX			
		< RESISTOR >			
R2501	1-216-073-00	METAL CHIP	10K	5%	1/10W
R2502	1-216-073-00	METAL CHIP	10K	5%	1/10W
R2503	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2504	1-216-097-91	RES-CHIP	100K	5%	1/10W
R2505	1-216-097-91	RES-CHIP	100K	5%	1/10W
R2506	1-216-097-91	RES-CHIP	100K	5%	1/10W
R2507	1-216-097-91	RES-CHIP	100K	5%	1/10W
R2508	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2509	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2510	1-216-049-91	RES-CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R2511	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2512	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2513	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2514	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2515	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2516	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2517	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2518	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2519	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2520	1-216-049-91	RES-CHIP	1K	5%	1/10W
R2521	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2522	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2523	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2524	1-216-105-91	RES-CHIP	220K	5%	1/10W
R2525	1-216-025-91	RES-CHIP	100	5%	1/10W
R2526	1-216-025-91	RES-CHIP	100	5%	1/10W

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* A-4591-277-A FADER BOARD, COMPLETE

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Ref. No.	Part No.	Description			Remarks
		< CAPACITOR >			
C1101	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C1102	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C1103	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C1104	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C1105	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C1106	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C1107	1-164-346-11	CERAMIC CHIP	1uF	0%	16V
C1108	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1109	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1110	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1111	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1112	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1113	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1114	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1115	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
		< CONNECTOR >			
* CN1101	1-566-970-11	HOUSING, CONNECTOR (PC BOARD) 8P			
* CN1102	1-566-970-11	HOUSING, CONNECTOR (PC BOARD) 8P			
* CN1103	1-566-970-11	HOUSING, CONNECTOR (PC BOARD) 8P			
* CN1104	1-566-970-11	HOUSING, CONNECTOR (PC BOARD) 8P			
* CN1105	1-566-970-11	HOUSING, CONNECTOR (PC BOARD) 8P			
* CN1106	1-566-970-11	HOUSING, CONNECTOR (PC BOARD) 8P			
CN1107	1-785-713-11	CONNECTOR, BOARD TO BOARD 4P			
CN1108	1-691-647-11	SOCKET, CONNECTOR 13P			
		< DIODE >			
D1101	8-719-032-86	DIODE SEL5420E-TP15 (RF/SIGNAL)			
D1102	8-719-422-46	DIODE MA8056-TX			
D1103	8-719-988-61	DIODE 1SS355TE-17			
D1104	8-719-988-61	DIODE 1SS355TE-17			
D1105	8-719-032-86	DIODE SEL5420E-TP15 (RF/SIGNAL)			
D1106	8-719-422-46	DIODE MA8056-TX			
D1107	8-719-988-61	DIODE 1SS355TE-17			
D1108	8-719-988-61	DIODE 1SS355TE-17			
D1109	8-719-032-86	DIODE SEL5420E-TP15 (SIGNAL)			
D1110	8-719-422-46	DIODE MA8056-TX			

FADER

Ref. No.	Part No.	Description	Remarks
D1111	8-719-988-61	DIODE 1SS355TE-17	
D1112	8-719-032-86	DIODE SEL5420E-TP15 (SIGNAL)	
D1113	8-719-422-46	DIODE MA8056-TX	
D1114	8-719-988-61	DIODE 1SS355TE-17	
D1115	8-719-032-86	DIODE SEL5420E-TP15 (SIGNAL)	
D1116	8-719-422-46	DIODE MA8056-TX	
D1117	8-719-988-61	DIODE 1SS355TE-17	
D1118	8-719-032-86	DIODE SEL5420E-TP15 (SIGNAL)	
D1119	8-719-422-46	DIODE MA8056-TX	
D1120	8-719-988-61	DIODE 1SS355TE-17	
D1121	8-719-032-86	DIODE SEL5420E-TP15 (SIGNAL)	
D1122	8-719-422-46	DIODE MA8056-TX	
D1123	8-719-988-61	DIODE 1SS355TE-17	
		< TERMINAL >	
EP1101	1-537-770-21	TERMINAL BOARD, GROUND	
		< IC >	
IC1101	8-759-711-85	IC NJM4580E-D-TE2	
IC1102	8-759-711-85	IC NJM4580E-D-TE2	
IC1103	8-759-711-85	IC NJM4580E-D-TE2	
IC1104	8-759-711-85	IC NJM4580E-D-TE2	
		< JUMPER RESISTOR >	
JC1101	1-216-296-91	SHORT 0	
JC1103	1-216-296-91	SHORT 0	
JC1104	1-216-296-91	SHORT 0	
JC1105	1-216-295-91	SHORT 0	
JC1106	1-216-295-91	SHORT 0	
JC1110	1-216-295-91	SHORT 0	
JC1111	1-216-296-91	SHORT 0	
JC1112	1-216-296-91	SHORT 0	
JC1114	1-216-295-91	SHORT 0	
JC1115	1-216-296-91	SHORT 0	
JC1116	1-216-296-91	SHORT 0	
JC1117	1-216-296-91	SHORT 0	
JC1118	1-216-296-91	SHORT 0	
JC1119	1-216-295-91	SHORT 0	
JC1120	1-216-295-91	SHORT 0	
JC1122	1-216-295-91	SHORT 0	
JC1123	1-216-296-91	SHORT 0	
JC1124	1-216-295-91	SHORT 0	
JC1125	1-216-296-91	SHORT 0	
JC1127	1-216-296-91	SHORT 0	
JC1128	1-216-295-91	SHORT 0	
		< TRANSISTOR >	
Q1101	8-729-424-08	TRANSISTOR UN2111-TX	
Q1102	8-729-424-08	TRANSISTOR UN2111-TX	
Q1103	8-729-424-08	TRANSISTOR UN2111-TX	
Q1104	8-729-424-08	TRANSISTOR UN2111-TX	
Q1105	8-729-424-08	TRANSISTOR UN2111-TX	
Q1106	8-729-424-08	TRANSISTOR UN2111-TX	
Q1107	8-729-424-08	TRANSISTOR UN2111-TX	
Q1108	8-729-424-08	TRANSISTOR UN2111-TX	
Q1109	8-729-424-08	TRANSISTOR UN2111-TX	
Q1110	8-729-424-08	TRANSISTOR UN2111-TX	
Q1111	8-729-424-08	TRANSISTOR UN2111-TX	
Q1112	8-729-424-08	TRANSISTOR UN2111-TX	
Q1113	8-729-424-08	TRANSISTOR UN2111-TX	
Q1114	8-729-424-08	TRANSISTOR UN2111-TX	

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
R1101	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1102	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1103	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1104	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1105	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1106	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1108	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1109	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1110	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1111	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1112	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1113	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1115	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1116	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1117	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1118	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1119	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1120	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1121	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1122	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1123	1-216-115-00	METAL CHIP	560K	5%	1/10W
R1124	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1125	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1126	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1127	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1128	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1129	1-216-111-00	METAL CHIP	390K	5%	1/10W
R1130	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1131	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1132	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1133	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1134	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1135	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1136	1-216-111-00	METAL CHIP	390K	5%	1/10W
R1137	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1138	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1139	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1140	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1141	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1142	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1143	1-216-111-00	METAL CHIP	390K	5%	1/10W
R1144	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1145	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1146	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1147	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1148	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R1149	1-216-047-91	RES-CHIP	820	5%	1/10W
R1150	1-216-047-91	RES-CHIP	820	5%	1/10W
R1151	1-216-047-91	RES-CHIP	820	5%	1/10W
R1152	1-216-047-91	RES-CHIP	820	5%	1/10W
R1153	1-216-047-91	RES-CHIP	820	5%	1/10W
R1154	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1155	1-216-047-91	RES-CHIP	820	5%	1/10W
R1156	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1157	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1158	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1159	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1160	1-216-047-91	RES-CHIP	820	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R1161	1-216-047-91	RES-CHIP	820	5%	1/10W
R1162	1-216-047-91	RES-CHIP	820	5%	1/10W
R1163	1-216-047-91	RES-CHIP	820	5%	1/10W
R1164	1-216-047-91	RES-CHIP	820	5%	1/10W
R1165	1-216-047-91	RES-CHIP	820	5%	1/10W
R1166	1-216-047-91	RES-CHIP	820	5%	1/10W
R1167	1-216-047-91	RES-CHIP	820	5%	1/10W

< VARIABLE RESISTOR >

Ref. No.	Part No.	Description
RV1101	1-227-147-11	RES, VAR, SLIDE 50K (MIC1 FADER)
RV1102	1-227-147-11	RES, VAR, SLIDE 50K (MIC2 FADER)
RV1103	1-227-147-11	RES, VAR, SLIDE 50K (MIC3 FADER)
RV1104	1-227-147-11	RES, VAR, SLIDE 50K (MIC4 FADER)
RV1105	1-227-148-11	RES, VAR, SLIDE 50K/50K (ST1 FADER)
RV1106	1-227-148-11	RES, VAR, SLIDE 50K/50K (ST2 FADER)
RV1107	1-227-148-11	RES, VAR, SLIDE 50K/50K (ST3 FADER)

< SWITCH >

Ref. No.	Part No.	Description
S1101	1-571-656-21	SWITCH, TACTIL (MUTING)
S1102	1-571-656-21	SWITCH, TACTIL (A)
S1103	1-571-656-21	SWITCH, TACTIL (B)
S1104	1-571-656-21	SWITCH, TACTIL (C)
S1105	1-571-656-21	SWITCH, TACTIL (D)

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* A-4591-272-A IND BOARD, COMPLETE

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< CAPACITOR >

Ref. No.	Part No.	Description			Remarks
C1901	1-164-346-11	CERAMIC CHIP	1uF	0%	16V

< CONNECTOR >

Ref. No.	Part No.	Description
CN1901	1-785-712-11	CONNECTOR, BOARD TO BOARD 4P
* CN1902	1-564-519-11	PLUG, CONNECTOR 4P

< DIODE >

Ref. No.	Part No.	Description
D1901	8-719-032-98	DIODE SEL5820A-TP15 (+48V)
D1902	8-719-812-44	DIODE SEL5220S-TP15 (EMG)
D1903	8-719-812-44	DIODE SEL5220S-TP15 (PROTECTION)
D1904	8-719-812-44	DIODE SEL5220S-TP15 (CLIP)
D1905	8-719-988-61	DIODE 1SS355TE-17
D1906	8-719-988-61	DIODE 1SS355TE-17
D1907	8-719-988-61	DIODE 1SS355TE-17
D1908	8-719-988-61	DIODE 1SS355TE-17

< TRANSISTOR >

Ref. No.	Part No.	Description
Q1901	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L
Q1902	8-729-216-22	TRANSISTOR 2SA1162G-TE85L
Q1903	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L
Q1904	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L

< RESISTOR >

Ref. No.	Part No.	Description			Remarks
R1901	1-216-083-00	METAL CHIP	27K	5%	1/10W
R1902	1-216-083-00	METAL CHIP	27K	5%	1/10W
R1903	1-216-047-91	RES-CHIP	820	5%	1/10W
R1904	1-216-047-91	RES-CHIP	820	5%	1/10W
R1905	1-216-047-91	RES-CHIP	820	5%	1/10W
R1906	1-216-047-91	RES-CHIP	820	5%	1/10W
R1907	1-216-097-91	RES-CHIP	100K	5%	1/10W
R1908	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1909	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1910	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1911	1-216-089-91	RES-CHIP	47K	5%	1/10W

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* A-4591-261-A IR BOARD, COMPLETE

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< CAPACITOR >

Ref. No.	Part No.	Description			Remarks
C1802	1-126-176-11	ELECT	220uF	20%	10V

< CONNECTOR >

Ref. No.	Part No.	Description
* CN1801	1-564-518-11	PLUG, CONNECTOR 3P

< IC >

Ref. No.	Part No.	Description
IC1801	8-759-459-86	IC NJL64H400A

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* A-4591-275-A LED BOARD, COMPLETE

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< DIODE >

Ref. No.	Part No.	Description
D2001	8-719-304-92	DIODE SEL4225R-D (MASTER VOLUME)

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* A-4591-259-A MASTER BOARD, COMPLETE

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< CAPACITOR >

Ref. No.	Part No.	Description			Remarks
C701	1-126-965-11	ELECT	22uF	20%	50V
C702	1-126-965-11	ELECT	22uF	20%	50V
C703	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C711	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C712	1-130-478-00	MYLAR	0.0039uF	5%	50V
C713	1-126-960-11	ELECT	1uF	20%	50V
C714	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C715	1-126-965-11	ELECT	22uF	20%	50V
C716	1-136-162-00	MYLAR	0.056uF	5%	50V
C717	1-126-965-11	ELECT	22uF	20%	50V
C718	1-126-965-11	ELECT	22uF	20%	50V
C721	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C722	1-130-478-00	MYLAR	0.0039uF	5%	50V
C723	1-126-960-11	ELECT	1uF	20%	50V
C724	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C725	1-126-965-11	ELECT	22uF	20%	50V
C726	1-136-162-00	MYLAR	0.056uF	5%	50V
C727	1-126-965-11	ELECT	22uF	20%	50V
C728	1-126-965-11	ELECT	22uF	20%	50V
C729	1-126-965-11	ELECT	22uF	20%	50V
C730	1-126-965-11	ELECT	22uF	20%	50V
C731	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C732	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C733	1-163-133-00	CERAMIC CHIP	470PF	5%	50V

< CONNECTOR >

Ref. No.	Part No.	Description
CN702	1-568-834-11	SOCKET, CONNECTOR 15P

< IC >

Ref. No.	Part No.	Description
IC701	8-759-711-85	IC NJM4580E-D-TE2
IC702	8-759-711-85	IC NJM4580E-D-TE2
IC703	8-759-711-85	IC NJM4580E-D-TE2
IC704	8-759-711-85	IC NJM4580E-D-TE2
IC705	8-759-711-85	IC NJM4580E-D-TE2

MASTER **MIC4** **MIX**

Ref. No.	Part No.	Description			Remarks
		< JUMPER RESISTOR >			
JC701	1-216-295-91	SHORT	0		
JC702	1-216-296-91	SHORT	0		
JC703	1-216-296-91	SHORT	0		
		< RESISTOR >			
R701	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R702	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R703	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R704	1-216-097-91	RES-CHIP	100K	5%	1/10W
R705	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R706	1-216-097-91	RES-CHIP	100K	5%	1/10W
R711	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R712	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R713	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R714	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R715	1-216-077-91	RES-CHIP	15K	5%	1/10W
R716	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R717	1-216-073-00	METAL CHIP	10K	5%	1/10W
R718	1-216-077-91	RES-CHIP	15K	5%	1/10W
R719	1-216-025-91	RES-CHIP	100	5%	1/10W
R720	1-216-073-00	METAL CHIP	10K	5%	1/10W
R721	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R722	1-216-097-91	RES-CHIP	100K	5%	1/10W
R723	1-216-025-91	RES-CHIP	100	5%	1/10W
R724	1-216-097-91	RES-CHIP	100K	5%	1/10W
R725	1-216-097-91	RES-CHIP	100K	5%	1/10W
R731	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R732	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R733	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R734	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R735	1-216-077-91	RES-CHIP	15K	5%	1/10W
R736	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R737	1-216-073-00	METAL CHIP	10K	5%	1/10W
R738	1-216-077-91	RES-CHIP	15K	5%	1/10W
R739	1-216-025-91	RES-CHIP	100	5%	1/10W
R740	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R741	1-216-073-00	METAL CHIP	10K	5%	1/10W
R742	1-216-097-91	RES-CHIP	100K	5%	1/10W
R743	1-216-025-91	RES-CHIP	100	5%	1/10W
R744	1-216-097-91	RES-CHIP	100K	5%	1/10W
R745	1-216-097-91	RES-CHIP	100K	5%	1/10W
R746	1-216-025-91	RES-CHIP	100	5%	1/10W
		< VARIABLE RESISTOR >			
RV701	1-227-150-11	RES, VAR 50K (MIC GROUP)			
RV702	1-227-151-11	RES, VAR 10K/10K (TREBLE)			
RV703	1-227-151-11	RES, VAR 10K/10K (BASS)			
RV704	1-227-152-11	RES, VAR 50K (BALANCE)			

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Ref. No.	Part No.	Description			Remarks
*	A-4591-262-A	MIC4 BOARD, COMPLETE *******************			
		< CAPACITOR >			
C2201	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2202	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
* CN2201	1-564-520-11	PLUG, CONNECTOR 5P			
CN2202	1-537-865-11	TERMINAL (M3)			
		< JACK >			
J2201	1-507-854-00	JACK,PHONE (MIC 4)			
		< JUMPER RESISTOR >			
JC2201	1-216-296-91	SHORT	0		
		< COIL >			
L2201	1-410-993-22	INDUCTOR CHIP	1uH		
L2202	1-410-993-22	INDUCTOR CHIP	1uH		

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Ref. No.	Part No.	Description			Remarks
*	A-4591-267-A	MIX BOARD, COMPLETE ******************			
	2-347-116-01	BRACKET (LONG)			
		< CAPACITOR >			
C301	1-124-261-00	ELECT	10uF	20%	50V
C302	1-124-261-00	ELECT	10uF	20%	50V
C303	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C304	1-124-261-00	ELECT	10uF	20%	50V
C305	1-124-261-00	ELECT	10uF	20%	50V
C306	1-124-261-00	ELECT	10uF	20%	50V
C307	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C308	1-124-261-00	ELECT	10uF	20%	50V
C309	1-124-261-00	ELECT	10uF	20%	50V
C310	1-124-261-00	ELECT	10uF	20%	50V
C311	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C312	1-124-261-00	ELECT	10uF	20%	50V
C313	1-124-261-00	ELECT	10uF	20%	50V
C314	1-124-261-00	ELECT	10uF	20%	50V
C315	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C316	1-124-261-00	ELECT	10uF	20%	50V
C317	1-124-261-00	ELECT	10uF	20%	50V
C318	1-124-261-00	ELECT	10uF	20%	50V
C319	1-124-589-11	ELECT	47uF	20%	16V
C320	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C321	1-124-261-00	ELECT	10uF	20%	50V
C322	1-124-261-00	ELECT	10uF	20%	50V
C323	1-124-589-11	ELECT	47uF	20%	16V
C324	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C325	1-124-261-00	ELECT	10uF	20%	50V
C326	1-124-261-00	ELECT	10uF	20%	50V
C327	1-124-589-11	ELECT	47uF	20%	16V
C328	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C329	1-124-261-00	ELECT	10uF	20%	50V
C330	1-124-261-00	ELECT	10uF	20%	50V
C331	1-124-589-11	ELECT	47uF	20%	16V
C332	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C333	1-124-261-00	ELECT	10uF	20%	50V
C334	1-124-261-00	ELECT	10uF	20%	50V
C335	1-124-589-11	ELECT	47uF	20%	16V
C336	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C337	1-124-261-00	ELECT	10uF	20%	50V
C338	1-124-261-00	ELECT	10uF	20%	50V
C339	1-124-589-11	ELECT	47uF	20%	16V
C340	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V

Ref. No.	Part No.	Description			Remarks
C341	1-124-589-11	ELECT	47uF	20%	16V
C342	1-124-589-11	ELECT	47uF	20%	16V
C343	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C344	1-124-261-00	ELECT	10uF	20%	50V
C345	1-124-261-00	ELECT	10uF	20%	50V
C346	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C347	1-124-261-00	ELECT	10uF	20%	50V
C348	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C349	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C350	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C351	1-124-261-00	ELECT	10uF	20%	50V
C352	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C353	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C354	1-124-261-00	ELECT	10uF	20%	50V
C355	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C356	1-124-261-00	ELECT	10uF	20%	50V
C357	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C358	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C359	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C360	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C361	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C362	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C363	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C364	1-124-261-00	ELECT	10uF	20%	50V
C365	1-124-261-00	ELECT	10uF	20%	50V
C373	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C374	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V

< CONNECTOR >

Ref. No.	Part No.	Description
CN301	1-779-826-11	SOCKET, CONNECTOR 27P
CN302	1-793-813-11	PIN, CONNECTOR (PC BOARD) 8P
CN303	1-764-403-11	SOCKET, CONNECTOR 35P
CN304	1-793-813-11	PIN, CONNECTOR (PC BOARD) 8P
* CN305	1-568-858-11	SOCKET, CONNECTOR 15P
CN306	1-793-813-11	PIN, CONNECTOR (PC BOARD) 8P
CN307	1-793-813-11	PIN, CONNECTOR (PC BOARD) 8P
CN308	1-793-813-11	PIN, CONNECTOR (PC BOARD) 8P
* CN309	1-564-519-11	PLUG, CONNECTOR 4P
CN310	1-793-813-11	PIN, CONNECTOR (PC BOARD) 8P

< IC >

Ref. No.	Part No.	Description	
IC301	8-759-711-85	IC	NJM4580E-D-TE2
IC302	8-759-711-85	IC	NJM4580E-D-TE2
IC303	8-759-711-85	IC	NJM4580E-D-TE2
IC304	8-759-711-85	IC	NJM4580E-D-TE2
IC305	8-759-711-85	IC	NJM4580E-D-TE2
IC306	8-759-711-85	IC	NJM4580E-D-TE2
IC307	8-759-711-85	IC	NJM4580E-D-TE2
IC308	8-759-711-85	IC	NJM4580E-D-TE2
IC309	8-759-711-85	IC	NJM4580E-D-TE2
IC310	8-759-711-85	IC	NJM4580E-D-TE2
IC311	8-759-711-85	IC	NJM4580E-D-TE2
IC312	8-759-711-85	IC	NJM4580E-D-TE2
IC313	8-759-711-85	IC	NJM4580E-D-TE2
IC314	8-759-711-85	IC	NJM4580E-D-TE2
IC315	8-759-711-85	IC	NJM4580E-D-TE2
IC316	8-759-962-08	IC	BA6208

< JUMPER RESISTOR >

Ref. No.	Part No.	Description	
JC301	1-216-296-91	SHORT	0
JC302	1-216-296-91	SHORT	0
JC303	1-216-296-91	SHORT	0
JC304	1-216-296-91	SHORT	0
JC305	1-216-296-91	SHORT	0
JC306	1-216-296-91	SHORT	0
JC307	1-216-296-91	SHORT	0
JC308	1-216-296-91	SHORT	0
JC309	1-216-295-91	SHORT	0
JC310	1-216-295-91	SHORT	0
JC311	1-216-295-91	SHORT	0
JC312	1-216-295-91	SHORT	0

< RESISTOR >

Ref. No.	Part No.	Description			Remarks
R301	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R302	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R304	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R305	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R306	1-216-089-91	RES-CHIP	47K	5%	1/10W
R307	1-216-049-91	RES-CHIP	1K	5%	1/10W
R308	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R309	1-216-025-91	RES-CHIP	100	5%	1/10W
R310	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R311	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R312	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R314	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R315	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R316	1-216-089-91	RES-CHIP	47K	5%	1/10W
R317	1-216-049-91	RES-CHIP	1K	5%	1/10W
R318	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R319	1-216-025-91	RES-CHIP	100	5%	1/10W
R320	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R321	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R322	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R324	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R325	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R326	1-216-089-91	RES-CHIP	47K	5%	1/10W
R327	1-216-049-91	RES-CHIP	1K	5%	1/10W
R328	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R329	1-216-025-91	RES-CHIP	100	5%	1/10W
R330	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R331	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R332	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R334	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R335	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R336	1-216-089-91	RES-CHIP	47K	5%	1/10W
R337	1-216-049-91	RES-CHIP	1K	5%	1/10W
R338	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R339	1-216-025-91	RES-CHIP	100	5%	1/10W
R340	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R341	1-216-073-00	METAL CHIP	10K	5%	1/10W
R343	1-216-073-00	METAL CHIP	10K	5%	1/10W
R344	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R345	1-216-049-91	RES-CHIP	1K	5%	1/10W
R346	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R347	1-216-073-00	METAL CHIP	10K	5%	1/10W
R348	1-216-025-91	RES-CHIP	100	5%	1/10W
R349	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R350	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R352	1-216-073-00	METAL CHIP	10K	5%	1/10W
R353	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R354	1-216-073-00	METAL CHIP	10K	5%	1/10W
R355	1-216-049-91	RES-CHIP	1K	5%	1/10W
R356	1-216-025-91	RES-CHIP	100	5%	1/10W
R357	1-216-073-00	METAL CHIP	10K	5%	1/10W
R358	1-216-073-00	METAL CHIP	10K	5%	1/10W
R359	1-216-089-91	RES-CHIP	47K	5%	1/10W
R360	1-216-089-91	RES-CHIP	47K	5%	1/10W
R361	1-216-073-00	METAL CHIP	10K	5%	1/10W
R363	1-216-073-00	METAL CHIP	10K	5%	1/10W
R364	1-216-073-00	METAL CHIP	10K	5%	1/10W
R365	1-216-049-91	RES-CHIP	1K	5%	1/10W
R366	1-216-025-91	RES-CHIP	100	5%	1/10W
R367	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R368	1-216-073-00	METAL CHIP	10K	5%	1/10W
R370	1-216-073-00	METAL CHIP	10K	5%	1/10W
R371	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R372	1-216-049-91	RES-CHIP	1K	5%	1/10W
R373	1-216-073-00	METAL CHIP	10K	5%	1/10W
R374	1-216-025-91	RES-CHIP	100	5%	1/10W
R375	1-216-073-00	METAL CHIP	10K	5%	1/10W
R376	1-216-073-00	METAL CHIP	10K	5%	1/10W
R377	1-216-089-91	RES-CHIP	47K	5%	1/10W
R378	1-216-089-91	RES-CHIP	47K	5%	1/10W
R379	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R381	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R382	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R383	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R384	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R385	1-216-049-91	RES-CHIP	1K	5%	1/10W
R386	1-216-025-91	RES-CHIP	100	5%	1/10W
R387	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R388	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R390	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R391	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R392	1-216-049-91	RES-CHIP	1K	5%	1/10W
R393	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R394	1-216-025-91	RES-CHIP	100	5%	1/10W
R395	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R396	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R397	1-216-089-91	RES-CHIP	47K	5%	1/10W
R398	1-216-089-91	RES-CHIP	47K	5%	1/10W
R399	1-216-073-00	METAL CHIP	10K	5%	1/10W
R400	1-216-073-00	METAL CHIP	10K	5%	1/10W
R401	1-216-073-00	METAL CHIP	10K	5%	1/10W
R402	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R403	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R404	1-216-073-00	METAL CHIP	10K	5%	1/10W
R405	1-216-073-00	METAL CHIP	10K	5%	1/10W
R406	1-216-073-00	METAL CHIP	10K	5%	1/10W
R407	1-216-097-91	RES-CHIP	100K	5%	1/10W
R408	1-216-097-91	RES-CHIP	100K	5%	1/10W
R409	1-216-073-00	METAL CHIP	10K	5%	1/10W
R410	1-216-073-00	METAL CHIP	10K	5%	1/10W
R411	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R412	1-216-025-91	RES-CHIP	100	5%	1/10W
R413	1-216-097-91	RES-CHIP	100K	5%	1/10W
R414	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R415	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R416	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R417	1-216-025-91	RES-CHIP	100	5%	1/10W
R418	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R419	1-216-097-91	RES-CHIP	100K	5%	1/10W
R420	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R421	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R422	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R423	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R424	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R425	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R426	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R427	1-216-097-91	RES-CHIP	100K	5%	1/10W
R428	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R429	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R430	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R431	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R432	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R433	1-216-097-91	RES-CHIP	100K	5%	1/10W
R434	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R435	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R437	1-216-029-00	METAL CHIP	150	5%	1/10W
R438	1-216-029-00	METAL CHIP	150	5%	1/10W
R439	1-216-029-00	METAL CHIP	150	5%	1/10W
R440	1-216-029-00	METAL CHIP	150	5%	1/10W
		< VARIABLE RESISTOR >			
RV301	1-227-149-11	RES, VAR 50K (MIC 1)			
RV302	1-227-149-11	RES, VAR 50K (MIC 2)			
RV303	1-227-149-11	RES, VAR 50K (MIC 3)			
RV304	1-227-149-11	RES, VAR 50K (MIC 4)			
RV305	1-227-146-11	RES, VAR 50K/50K (ST1)			
RV306	1-227-146-11	RES, VAR 50K/50K (ST2)			
RV307	1-227-146-11	RES, VAR 50K/50K (ST3)			
		< SWITCH >			
S301	1-571-872-11	SWITCH, PUSH (1 KEY) (ECHO RETURN)			

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Ref. No.	Part No.	Description			Remarks
*	A-4591-276-A	PA BOARD, COMPLETE *****************			
		< BUS BAR >			
* BB601	1-560-242-31	BUS BAR 5P			
* BB602	1-560-242-31	BUS BAR 5P			
* BB603	1-560-242-21	BUS BAR 4P			
* BB604	1-560-242-21	BUS BAR 4P			
		< CAPACITOR >			
C603	1-137-353-11	MYLAR	0.047uF	10%	100V
C604	1-137-353-11	MYLAR	0.047uF	10%	100V
C605	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C608	1-126-916-11	ELECT	1000uF	20%	6.3V
C611	1-137-353-11	MYLAR	0.047uF	10%	100V
C612	1-137-353-11	MYLAR	0.047uF	10%	100V
C613	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C616	1-126-916-11	ELECT	1000uF	20%	6.3V
C617	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C619	1-104-665-11	ELECT	100uF	20%	25V
C620	1-126-934-11	ELECT	220uF	20%	16V
C621	1-126-934-11	ELECT	220uF	20%	16V
C622	1-104-665-11	ELECT	100uF	20%	25V
C625	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	
* CN601	1-564-517-11	PLUG, CONNECTOR 2P	
* CN602	1-564-519-11	PLUG, CONNECTOR 4P	
* CN603	1-564-215-11	PIN, CONNECTOR 4P	
* CN604	1-566-693-11	PIN, CONNECTOR 2P	
* CN605	1-564-517-11	PLUG, CONNECTOR 2P	
* CN606	1-564-505-11	PLUG, CONNECTOR 2P	
* CN607	1-564-505-11	PLUG, CONNECTOR 2P	
		< DIODE >	
D601	8-719-200-82	DIODE 11ES2-TB5	
D602	8-719-988-61	DIODE 1SS355TE-17	
D603	8-719-988-61	DIODE 1SS355TE-17	
D605	8-719-988-61	DIODE 1SS355TE-17	
D606	8-719-200-82	DIODE 11ES2-TB5	
D607	8-719-422-46	DIODE MA8056-TX	
D608	8-719-200-82	DIODE 11ES2-TB5	
D609	8-719-988-61	DIODE 1SS355TE-17	
D610	8-719-988-61	DIODE 1SS355TE-17	
D612	8-719-988-61	DIODE 1SS355TE-17	
D613	8-719-200-82	DIODE 11ES2-TB5	
D614	8-719-422-46	DIODE MA8056-TX	
D615	8-719-988-61	DIODE 1SS355TE-17	
D616	8-719-988-61	DIODE 1SS355TE-17	
D617	8-719-422-46	DIODE MA8056-TX	
D618	8-719-422-46	DIODE MA8056-TX	
D619	8-719-988-61	DIODE 1SS355TE-17	
D620	8-719-988-61	DIODE 1SS355TE-17	
D621	8-719-073-03	DIODE MA8082-TX	
D622	8-719-073-03	DIODE MA8082-TX	
D623	8-719-073-03	DIODE MA8082-TX	
D624	8-719-073-03	DIODE MA8082-TX	
		< IC >	
IC601	8-759-111-68	IC uPC1237HA	
		< TRANSISTOR >	
Q601	8-749-010-25	IC MN2488-OPY-M	
Q602	8-749-010-25	IC MN2488-OPY-M	
Q603	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q604	8-729-017-05	TRANSISTOR 2SA1837	
Q605	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q606	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q607	8-729-045-15	TRANSISTOR 2SC5169-FG	
Q608	8-729-026-08	TRANSISTOR 2SC4495	
Q609	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q610	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q611	8-729-017-06	TRANSISTOR 2SC4793	
Q612	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q613	8-749-010-26	IC MP1620-OPY-M	
Q614	8-749-010-26	IC MP1620-OPY-M	
Q615	8-749-010-25	IC MN2488-OPY-M	
Q616	8-749-010-25	IC MN2488-OPY-M	
Q617	8-729-017-05	TRANSISTOR 2SA1837	
Q618	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q619	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q620	8-729-045-15	TRANSISTOR 2SC5169-FG	

Ref. No.	Part No.	Description			Remarks
Q621	8-729-026-08	TRANSISTOR 2SC4495			
Q622	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA			
Q623	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA			
Q624	8-729-017-06	TRANSISTOR 2SC4793			
Q625	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA			
Q626	8-749-010-26	IC MP1620-OPY-M			
Q627	8-749-010-26	IC MP1620-OPY-M			
		< RESISTOR >			
⚠R601	1-212-897-00	FUSIBLE	470	5%	1/4W
⚠R602	1-212-897-00	FUSIBLE	470	5%	1/4W
⚠R603	1-211-791-11	FUSIBLE	220	5%	1/4W
R604	1-216-097-91	RES-CHIP	100K	5%	1/10W
R605	1-216-441-00	METAL OXIDE	27K	5%	1W
R606	1-216-105-91	RES-CHIP	220K	5%	1/10W
R607	1-216-041-00	METAL CHIP	470	5%	1/10W
R608	1-216-041-00	METAL CHIP	470	5%	1/10W
⚠R610	1-211-775-11	FUSIBLE	10	5%	1/4W
⚠R611	1-211-775-11	FUSIBLE	10	5%	1/4W
R614	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R616	1-216-089-91	RES-CHIP	47K	5%	1/10W
R617	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R618	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R619	1-216-089-91	RES-CHIP	47K	5%	1/10W
R620	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R621	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R622	1-217-151-00	METAL	0.22	10%	2W
R623	1-217-151-00	METAL	0.22	10%	2W
R624	1-216-295-91	SHORT	0		
R625	1-216-017-91	RES-CHIP	47	5%	1/10W
R626	1-216-089-91	RES-CHIP	47K	5%	1/10W
R627	1-215-857-11	METAL OXIDE	10	5%	1W
R628	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R629	1-217-151-00	METAL	0.22	10%	2W
R630	1-217-151-00	METAL	0.22	10%	2W
R631	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R632	1-216-049-91	RES-CHIP	1K	5%	1/10W
R633	1-216-101-00	METAL CHIP	150K	5%	1/10W
R635	1-216-049-91	RES-CHIP	1K	5%	1/10W
R636	1-216-089-91	RES-CHIP	47K	5%	1/10W
⚠R637	1-211-775-11	FUSIBLE	10	5%	1/4W
⚠R638	1-211-775-11	FUSIBLE	10	5%	1/4W
⚠R639	1-212-897-00	FUSIBLE	470	5%	1/4W
⚠R640	1-211-791-11	FUSIBLE	220	5%	1/4W
R641	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R642	1-249-963-11	CARBON	47K	5%	1/4W
⚠R643	1-212-897-00	FUSIBLE	470	5%	1/4W
⚠R644	1-212-897-00	FUSIBLE	470	5%	1/4W
⚠R645	1-211-791-11	FUSIBLE	220	5%	1/4W
R646	1-216-441-00	METAL OXIDE	27K	5%	1W
R647	1-216-041-00	METAL CHIP	470	5%	1/10W
R648	1-216-041-00	METAL CHIP	470	5%	1/10W
R650	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
⚠R651	1-211-775-11	FUSIBLE	10	5%	1/4W

⚠印の部品，または ⚠印付きの点線で囲まれた部品は，
安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

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PA PS1 PS2

Ref. No.	Part No.	Description			Remarks
⚠R652	1-211-775-11	FUSIBLE	10	5%	1/4W
R655	1-216-089-91	RES-CHIP	47K	5%	1/10W
R656	1-216-089-91	RES-CHIP	47K	5%	1/10W
R658	1-216-295-91	SHORT	0		
R659	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R660	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R661	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R662	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R663	1-217-151-00	METAL	0.22	10%	2W
R664	1-217-151-00	METAL	0.22	10%	2W
R665	1-216-017-91	RES-CHIP	47	5%	1/10W
R666	1-216-089-91	RES-CHIP	47K	5%	1/10W
R667	1-215-857-11	METAL OXIDE	10	5%	1W
R668	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R669	1-217-151-00	METAL	0.22	10%	2W
R670	1-217-151-00	METAL	0.22	10%	2W
R671	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R672	1-216-049-91	RES-CHIP	1K	5%	1/10W
R673	1-216-101-00	METAL CHIP	150K	5%	1/10W
R675	1-216-049-91	RES-CHIP	1K	5%	1/10W
⚠R676	1-211-775-11	FUSIBLE	10	5%	1/4W
⚠R677	1-211-775-11	FUSIBLE	10	5%	1/4W
R678	1-216-089-91	RES-CHIP	47K	5%	1/10W
⚠R679	1-212-897-00	FUSIBLE	470	5%	1/4W
⚠R680	1-211-791-11	FUSIBLE	220	5%	1/4W
R681	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R682	1-249-963-11	CARBON	47K	5%	1/4W
R683	1-216-083-00	METAL CHIP	27K	5%	1/10W
R684	1-216-083-00	METAL CHIP	27K	5%	1/10W
R685	1-216-083-00	METAL CHIP	27K	5%	1/10W
R686	1-216-083-00	METAL CHIP	27K	5%	1/10W
R687	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R688	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R689	1-216-097-91	RES-CHIP	100K	5%	1/10W
R690	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R691	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R692	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R693	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R694	1-216-089-91	RES-CHIP	47K	5%	1/10W
R695	1-216-073-00	METAL CHIP	10K	5%	1/10W
R696	1-215-868-00	METAL OXIDE	680	5%	1W
R699	1-216-089-91	RES-CHIP	47K	5%	1/10W
R3001	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R3002	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R3003	1-216-089-91	RES-CHIP	47K	5%	1/10W
R3004	1-216-089-91	RES-CHIP	47K	5%	1/10W
		< VARIABLE RESISTOR >			
RV601	1-241-760-11	RES, ADJ, CARBON 470			
RV602	1-241-760-11	RES, ADJ, CARBON 470			

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Ref. No.	Part No.	Description			Remarks
*	A-4591-268-A	PS1 BOARD, COMPLETE *******************			
		< CAPACITOR >			
C1401	1-136-189-00	MYLAR	0.1uF	10%	250V
C1402	1-131-967-11	ELECT	10000uF	20%	80V
C1403	1-131-967-11	ELECT	10000uF	20%	80V
C1404	1-136-189-00	MYLAR	0.1uF	10%	250V
C1405	1-128-581-11	ELECT	4.7uF	20%	100V

Ref. No.	Part No.	Description			Remarks
		< CONNECTOR >			
CN1401	1-785-103-11	PIN, CONNECTOR 5P			
* CN1402	1-564-104-00	PIN, CONNECTOR (B3P-VH) 3P			
CN1403	1-695-915-11	TAB (CONTACT)			
		< DIODE >			
D1401	8-719-033-58	DIODE RBV-1506			
D1402	8-719-200-82	DIODE 11ES2-TB5			
		< RESISTOR >			
R1401	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1402	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1403	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1404	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

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Ref. No.	Part No.	Description			Remarks
*	A-4591-280-A	PS2 BOARD, COMPLETE (AEP, E) *******************			
*	A-4591-269-A	PS2 BOARD, COMPLETE (J) *******************			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C1501	1-137-353-11	MYLAR	0.047uF	10%	100V
C1502	1-126-955-11	ELECT	4700uF	20%	35V
C1503	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1504	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1505	1-126-955-11	ELECT	4700uF	20%	35V
C1506	1-137-353-11	MYLAR	0.047uF	10%	100V
C1507	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1508	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1509	1-126-969-11	ELECT	220uF	20%	50V
C1510	1-126-967-11	ELECT	47uF	20%	50V
C1511	1-126-969-11	ELECT	220uF	20%	50V
C1512	1-126-967-11	ELECT	47uF	20%	50V
C1513	1-128-576-11	ELECT	100uF	20%	63V
C1514	1-126-953-11	ELECT	2200uF	20%	35V
C1515	1-126-971-11	ELECT	470uF	20%	50V
C1516	1-126-937-11	ELECT	4700uF	20%	16V
C1517	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1518	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1519	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1520	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1521	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1522	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1523	1-126-965-11	ELECT	22uF	20%	50V
		< CONNECTOR >			
* CN1501	1-564-321-21	PIN, CONNECTOR 2P			
CN1502	1-785-103-11	PIN, CONNECTOR 5P			
CN1503	1-569-337-11	CONNECTOR, BOARD TO BOARD 11P			
CN1504	1-564-321-00	PIN, CONNECTOR 2P			
* CN1505	1-564-505-11	PLUG, CONNECTOR 2P			
* CN1506	1-564-505-11	PLUG, CONNECTOR 2P			

⚠印の部品，または⚠印付きの点線で囲まれた部品は，
安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

The components identified by mark ⚠ or dotted
line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
		< DIODE >			
D1501	8-719-511-40	DIODE S1VB20			
D1502	8-719-200-82	DIODE 11ES2-TB5			
D1503	8-719-200-82	DIODE 11ES2-TB5			
D1504	8-719-200-82	DIODE 11ES2-TB5			
D1505	8-719-200-82	DIODE 11ES2-TB5			
D1506	8-719-160-78	DIODE RD24FB2			
D1507	8-719-160-78	DIODE RD24FB2			
D1508	8-719-200-82	DIODE 11ES2-TB5			
D1509	8-719-200-82	DIODE 11ES2-TB5			
D1510	8-719-200-82	DIODE 11ES2-TB5			
D1511	8-719-073-03	DIODE MA8082-TX			
D1512	8-719-500-36	DIODE D2SB20			
		< IC >			
IC1501	8-759-701-75	IC NJM7805FA			
		< JACK >			
⚠J1501	1-540-043-21	OUTLET,AC (NONPOLAR) (3P) (AC OUTLET) (J)			
		< TRANSISTOR >			
Q1501	8-729-017-06	TRANSISTOR 2SC4793			
Q1502	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
Q1503	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L			
		< RESISTOR >			
R1501	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1502	1-216-073-00	METAL CHIP	10K	5%	1/10W
R1503	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1504	1-216-081-00	METAL CHIP	22K	5%	1/10W
R1505	1-216-081-00	METAL CHIP	22K	5%	1/10W
		< THERMISTOR >			
TH1501	1-801-696-11	THERMISTOR, POSITIVE			
TH1502	1-801-696-11	THERMISTOR, POSITIVE			
TH1503	1-801-696-11	THERMISTOR, POSITIVE			
TH1504	1-801-696-11	THERMISTOR, POSITIVE			

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Ref. No.	Part No.	Description			Remarks
*	A-4591-260-A	PSW BOARD, COMPLETE ******************			
		< CAPACITOR >			
⚠C1701	1-117-703-11	CERAMIC	0.0047uF	0%	250V
		< CONNECTOR >			
CN1701	1-564-321-00	PIN, CONNECTOR 2P			
		< SWITCH >			
⚠S1701	1-771-187-11	SWITCH, AC POWER (①)			

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Ref. No.	Part No.	Description			Remarks
*	A-4591-271-A	SP MOUNTED BOARD, COMPLETE *************************			
		< CONNECTOR >			
* CN1601	1-770-318-11	PIN, CONNECTOR 7P			
CN1602	1-537-314-31	TERMINAL BOARD (SP) (SPEAKERS)			

Ref. No.	Part No.	Description			Remarks
		< DIODE >			
D1601	8-719-200-82	DIODE 11ES2-TB5			
D1602	8-719-200-82	DIODE 11ES2-TB5			
		< COIL >			
L1601	1-411-766-11	COIL, AIR-CORE			
L1602	1-411-766-11	COIL, AIR-CORE			
		< RESISTOR >			
R1601	1-215-857-11	METAL OXIDE	10	5%	1W
R1602	1-215-857-11	METAL OXIDE	10	5%	1W
		< RELAY >			
RY1601	1-755-141-11	RELAY			
RY1602	1-755-141-11	RELAY			

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Ref. No.	Part No.	Description			Remarks
*	A-4591-266-A	S-VIDEO BOARD, COMPLETE ***********************			
		< CAPACITOR >			
C901	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C902	1-126-965-11	ELECT	22uF	20%	50V
C903	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C904	1-126-965-11	ELECT	22uF	20%	50V
C905	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C906	1-126-965-11	ELECT	22uF	20%	50V
C907	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C908	1-126-965-11	ELECT	22uF	20%	50V
C909	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C910	1-126-916-11	ELECT	1000uF	20%	6.3V
C911	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C912	1-126-916-11	ELECT	1000uF	20%	6.3V
C913	1-126-941-11	ELECT	470uF	20%	25V
C914	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C915	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C916	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C917	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN901	1-764-676-11	CONNECTOR (ROUND TYPE) (S VIDEO A/S VIDEO B)			
CN902	1-764-676-11	CONNECTOR (ROUND TYPE) (S VIDEO C/S VIDEO D)			
CN903	1-764-676-11	CONNECTOR (ROUND TYPE) (MASTER/REC)			
* CN904	1-568-848-11	SOCKET, CONNECTOR 5P			
* CN905	1-568-824-11	SOCKET, CONNECTOR 5P			
		< DIODE >			
D901	8-719-422-46	DIODE MA8056-TX			
D902	8-719-422-46	DIODE MA8056-TX			
D903	8-719-422-46	DIODE MA8056-TX			
D904	8-719-422-46	DIODE MA8056-TX			
D905	8-719-422-46	DIODE MA8056-TX			

⚠印の部品、または⚠印付きの点線で囲まれた部品は、
安全性を維持するために重要な部品です。
従って交換時は、必ず指定の部品を使用して下さい。

The components identified by mark ⚠ or dotted
line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
D906	8-719-422-46	DIODE MA8056-TX			
D907	8-719-422-46	DIODE MA8056-TX			
D908	8-719-422-46	DIODE MA8056-TX			
D909	8-719-422-46	DIODE MA8056-TX			
D910	8-719-422-46	DIODE MA8056-TX			
D911	8-719-422-46	DIODE MA8056-TX			
D912	8-719-422-46	DIODE MA8056-TX			
		< IC >			
IC901	8-759-991-77	IC BA7625			
IC902	8-759-991-78	IC BA7626			
		< JUMPER RESISTOR >			
JC901	1-216-296-91	SHORT	0		
JC902	1-216-296-91	SHORT	0		
JC903	1-216-296-91	SHORT	0		
JC904	1-216-296-91	SHORT	0		
JC905	1-216-296-91	SHORT	0		
JC906	1-216-296-91	SHORT	0		
JC907	1-216-296-91	SHORT	0		
JC908	1-216-296-91	SHORT	0		
JC909	1-216-295-91	SHORT	0		
JC910	1-216-296-91	SHORT	0		
JC911	1-216-296-91	SHORT	0		
JC912	1-216-296-91	SHORT	0		
JC913	1-216-296-91	SHORT	0		
		< TRANSISTOR >			
Q901	8-729-216-22	TRANSISTOR 2SA1162G-TE85L			
Q902	8-729-216-22	TRANSISTOR 2SA1162G-TE85L			
Q903	8-729-216-22	TRANSISTOR 2SA1162G-TE85L			
Q904	8-729-216-22	TRANSISTOR 2SA1162G-TE85L			
		< RESISTOR >			
R901	1-216-025-91	RES-CHIP	100	5%	1/10W
R902	1-216-025-91	RES-CHIP	100	5%	1/10W
R903	1-216-022-00	METAL CHIP	75	5%	1/10W
R904	1-216-025-91	RES-CHIP	100	5%	1/10W
R905	1-216-022-00	METAL CHIP	75	5%	1/10W
R906	1-216-025-91	RES-CHIP	100	5%	1/10W
R907	1-216-022-00	METAL CHIP	75	5%	1/10W
R908	1-216-022-00	METAL CHIP	75	5%	1/10W
R909	1-216-041-00	METAL CHIP	470	5%	1/10W
R910	1-216-025-91	RES-CHIP	100	5%	1/10W
R911	1-216-022-00	METAL CHIP	75	5%	1/10W
R912	1-216-022-00	METAL CHIP	75	5%	1/10W
R913	1-216-041-00	METAL CHIP	470	5%	1/10W
R914	1-216-025-91	RES-CHIP	100	5%	1/10W
R915	1-216-022-00	METAL CHIP	75	5%	1/10W
R916	1-216-022-00	METAL CHIP	75	5%	1/10W
R917	1-216-022-00	METAL CHIP	75	5%	1/10W
R918	1-216-073-00	METAL CHIP	10K	5%	1/10W
R919	1-216-073-00	METAL CHIP	10K	5%	1/10W
R920	1-216-022-00	METAL CHIP	75	5%	1/10W
R921	1-216-089-91	RES-CHIP	47K	5%	1/10W
R922	1-216-089-91	RES-CHIP	47K	5%	1/10W
R923	1-216-089-91	RES-CHIP	47K	5%	1/10W
R924	1-216-022-00	METAL CHIP	75	5%	1/10W
R925	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R926	1-216-073-00	METAL CHIP	10K	5%	1/10W
R927	1-216-022-00	METAL CHIP	75	5%	1/10W
**					
*	A-4591-273-A	TH1 BOARD, COMPLETE *******************			
		< THERMISTOR >			
TH2301	1-809-664-51	THERMISTOR, POSITIVE			
**					
*	A-4591-274-A	TH2 BOARD, COMPLETE *******************			
TH2401	1-809-664-51	THERMISTOR, POSITIVE			
**					
*	A-4591-287-A	TUN BOARD, COMPLETE (AEP, E) *******************			
*	A-4591-270-A	TUN BOARD, COMPLETE (J) *******************			
		< CAPACITOR >			
C1201	1-124-261-00	ELECT	10uF	20%	50V
C1202	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1203	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1204	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1205	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C1206	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1207	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1208	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1209	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1210	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C1211	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1212	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1213	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1214	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1215	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
		< CONNECTOR >			
CN1201	1-569-668-11	CONNECTOR, BOARD TO BOARD 10P			
CN1202	1-569-668-11	CONNECTOR, BOARD TO BOARD 10P			
CN1203	1-568-548-11	JACK, MINIATUER PIN			
CN1204	1-568-548-11	JACK, MINIATUER PIN			
CN1205	1-691-769-11	PLUG (MICRO CONNECTOR) 7P			
		< DIODE >			
D1201	8-719-200-82	DIODE 11ES2-TB5			
		< FILTER >			
FL1201	1-234-469-11	FILTER, BAND PASS (J)			
FL1202	1-234-469-11	FILTER, BAND PASS (J)			
		< IC >			
IC1201	8-759-708-05	IC NJM78L05A			
IC1202	8-759-143-51	IC uPC1675G-T1			
IC1203	8-759-143-51	IC uPC1675G-T1			

< JUMPER RESISTOR >

Ref. No.	Part No.	Description				Remarks
JC1201	1-216-295-91	SHORT	0			
JC1202	1-216-295-91	SHORT	0			
JC1203	1-216-295-91	SHORT	0			
JC1204	1-216-295-91	SHORT	0			
JC1205	1-216-296-91	SHORT	0			
JC1206	1-216-296-91	SHORT	0			
JC1207	1-216-296-91	SHORT	0			
JC1208	1-216-296-91	SHORT	0			
JC1209	1-216-296-91	SHORT	0			
JC1210	1-216-296-91	SHORT	0			

< RESISTOR >

Ref. No.	Part No.	Description				Remarks
R1201	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1202	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1204	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1205	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1206	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1208	1-216-025-91	RES-CHIP	100	5%	1/10W	

< TRANSFORMER >

Ref. No.	Part No.	Description	Remarks
T1201	1-429-252-11	TRANSFORMER, HIGH-FREQUENCY	
T1202	1-429-252-11	TRANSFORMER, HIGH-FREQUENCY	

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Ref. No.	Part No.	Description	Remarks
*	A-4591-265-A	VIDEO BOARD, COMPLETE	

****

< CAPACITOR >

Ref. No.	Part No.	Description				Remarks
C801	1-126-934-11	ELECT	220uF	20%	16V	
C802	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	
C803	1-126-934-11	ELECT	220uF	20%	16V	
C804	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	
C805	1-104-665-11	ELECT	100uF	20%	25V	
C806	1-126-965-11	ELECT	22uF	20%	50V	
C807	1-126-965-11	ELECT	22uF	20%	50V	
C808	1-104-665-11	ELECT	100uF	20%	25V	
C809	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C810	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C811	1-126-965-11	ELECT	22uF	20%	50V	
C812	1-126-965-11	ELECT	22uF	20%	50V	
C821	1-104-665-11	ELECT	100uF	20%	25V	
C822	1-126-916-11	ELECT	1000uF	20%	6.3V	
C823	1-126-916-11	ELECT	1000uF	20%	6.3V	
C824	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C825	1-126-965-11	ELECT	22uF	20%	50V	
C826	1-126-965-11	ELECT	22uF	20%	50V	
C827	1-126-965-11	ELECT	22uF	20%	50V	
C828	1-126-965-11	ELECT	22uF	20%	50V	

< CONNECTOR >

Ref. No.	Part No.	Description	Remarks
* CN801	1-568-854-11	SOCKET, CONNECTOR 11P	
CN802	1-537-865-11	TERMINAL (M3)	
* CN803	1-568-824-11	SOCKET, CONNECTOR 5P	

< DIODE >

Ref. No.	Part No.	Description		Remarks
D801	8-719-017-91	DIODE	MA8160-TX	
D802	8-719-017-91	DIODE	MA8160-TX	
D803	8-719-017-91	DIODE	MA8160-TX	
D804	8-719-017-91	DIODE	MA8160-TX	
D805	8-719-017-91	DIODE	MA8160-TX	
D806	8-719-017-91	DIODE	MA8160-TX	
D807	8-719-017-91	DIODE	MA8160-TX	
D808	8-719-017-91	DIODE	MA8160-TX	
D811	8-719-422-46	DIODE	MA8056-TX	
D812	8-719-422-46	DIODE	MA8056-TX	
D813	8-719-422-46	DIODE	MA8056-TX	
D814	8-719-422-46	DIODE	MA8056-TX	
D815	8-719-422-46	DIODE	MA8056-TX	
D816	8-719-422-46	DIODE	MA8056-TX	

< IC >

Ref. No.	Part No.	Description		Remarks
IC801	8-759-711-85	IC	NJM4580E-D-TE2	
IC802	8-759-711-85	IC	NJM4580E-D-TE2	
IC803	8-759-991-77	IC	BA7625	

< JACK >

Ref. No.	Part No.	Description	Remarks
J801	1-750-973-11	JACK (LARGE TYPE) (2 GANG) (MASTER INSERT R/L)	
J802	1-766-400-11	JACK, PIN 2P (REC/MASTER)	
J803	1-766-400-11	JACK, PIN 2P (VIDEO A/VIDEO B)	
J804	1-766-400-11	JACK, PIN 2P (VIDEO C/VIDEO D)	

< JUMPER RESISTOR >

Ref. No.	Part No.	Description		Remarks
JC801	1-216-296-91	SHORT	0	
JC802	1-216-296-91	SHORT	0	
JC803	1-216-296-91	SHORT	0	
JC804	1-216-296-91	SHORT	0	
JC821	1-216-295-91	SHORT	0	
JC822	1-216-295-91	SHORT	0	

< TRANSISTOR >

Ref. No.	Part No.	Description		Remarks
Q801	8-729-202-38	TRANSISTOR	2SC3326N-TE85L-AB	
Q802	8-729-202-38	TRANSISTOR	2SC3326N-TE85L-AB	
Q803	8-729-216-22	TRANSISTOR	2SA1162G-TE85L	
Q804	8-729-216-22	TRANSISTOR	2SA1162G-TE85L	

< RESISTOR >

Ref. No.	Part No.	Description				Remarks
R801	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R802	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R803	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R804	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R805	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R806	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R807	1-216-041-00	METAL CHIP	470	5%	1/10W	
R808	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R809	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R810	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R811	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R812	1-216-041-00	METAL CHIP	470	5%	1/10W	
R813	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R814	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R815	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R816	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R817	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R818	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R819	1-216-025-91	RES-CHIP	100	5%	1/10W	
R820	1-216-041-00	METAL CHIP	470	5%	1/10W	
R821	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R822	1-216-097-91	RES-CHIP	100K	5%	1/10W	
R823	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R824	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R825	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	

VIDEO **VOL**

Ref. No.	Part No.	Description			Remarks
R826	1-216-081-00	METAL CHIP	22K	5%	1/10W
R827	1-216-079-00	METAL CHIP	18K	5%	1/10W
R828	1-216-097-91	RES-CHIP	100K	5%	1/10W
R829	1-216-041-00	METAL CHIP	470	5%	1/10W
R830	1-216-025-91	RES-CHIP	100	5%	1/10W
R831	1-216-089-91	RES-CHIP	47K	5%	1/10W
R832	1-216-089-91	RES-CHIP	47K	5%	1/10W
R833	1-216-089-91	RES-CHIP	47K	5%	1/10W
R834	1-216-025-91	RES-CHIP	100	5%	1/10W
R835	1-216-025-91	RES-CHIP	100	5%	1/10W
R836	1-216-022-00	METAL CHIP	75	5%	1/10W
R837	1-216-073-00	METAL CHIP	10K	5%	1/10W
R838	1-216-025-91	RES-CHIP	100	5%	1/10W
R839	1-216-025-91	RES-CHIP	100	5%	1/10W
R840	1-216-022-00	METAL CHIP	75	5%	1/10W
R841	1-216-073-00	METAL CHIP	10K	5%	1/10W
R842	1-216-022-00	METAL CHIP	75	5%	1/10W
R843	1-216-022-00	METAL CHIP	75	5%	1/10W
R844	1-216-022-00	METAL CHIP	75	5%	1/10W
R845	1-216-022-00	METAL CHIP	75	5%	1/10W
		< SWITCH >			
S801	1-554-796-11	SWITCH, SLIDE (STEREO/MONOMIX)			

****

Ref. No.	Part No.	Description	Remarks
*	A-4591-264-A	VOL BOARD, COMPLETE *******************	
		< CONNECTOR >	
CN2101	1-691-769-11	PLUG (MICRO CONNECTOR) 7P	
CN2102	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
* CN2103	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
		< VARIABLE RESISTOR >	
RV2101	1-223-811-11	RES, VAR, CARBON 100K/100K	(MASTER VOLUME)

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Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS *************	
27	1-773-006-11	WIRE (FLAT TYPE) (15 CORE)	
54	1-698-890-11	DC FAN (92 SQUARE)	
57	1-769-945-11	WIRE (FLAT TYPE) (11 CORE)	
60	1-769-840-11	WIRE (FLAT TYPE) (5 CORE)	
61	1-769-910-11	WIRE (FLAT TYPE) (9 CORE)	
62	1-769-846-11	WIRE (FLAT TYPE) (5 CORE)	
63	1-769-993-11	WIRE (FLAT TYPE) (13 CORE)	
⚠69	1-559-297-71	CODE, POWER (J)	
⚠69	1-559-479-11	CORD, POWER (E)	
⚠69	1-575-953-11	CORD, POWER (AEP)	
⚠74	1-532-546-51	BREAKER, CIRCUIT (E, J)	
⚠74	1-576-408-11	BREAKER, CIRCUIT (AEP)	
77	1-773-261-11	WIRE (FLAT TYPE) (27 CORE)	
78	1-773-415-11	WIRE (FLAT TYPE) (35 CORE)	
⚠T1	1-435-234-12	POWER TRANSFORMER (J)	
⚠T1	1-435-277-11	POWER TRANSFORMER (E)	
⚠T1	1-435-278-11	POWER TRANSFORMER (AEP)	

****

Ref. No.	Part No.	Description	Remarks
		ACCESSORIES & PACKING MATERIALS ******************************	
	1-418-742-11	COMMANDER, STANDARD	
	2-347-110-01	MANUAL, INSTRUCTION (JAPANESE) (J)	
	2-347-110-11	MANUAL, INSTRUCTION (ENGLISH) (E)	
	2-347-110-21	MANUAL, INSTRUCTION (ENGLISH) (AEP)	

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Ref. No.	Part No.	Description	Remarks
		************* HARDWARE LIST *************	
#1	7-685-870-09	SCREW +BVTT 3X5 (S)	
#2	7-682-547-09	SCREW +B 3X6	
#3	7-682-548-09	SCREW +B 3X8	
#4	7-682-549-09	SCREW +B 3X10	
#5	7-682-551-09	SCREW +B 3X14	
#6	7-682-560-09	SCREW +B 4X6	
#7	7-682-968-01	SCREW +PSW 4X30	
#8	7-685-647-79	SCREW +BVTP 3X10 TYPE2 TT (B)	
#9	7-685-861-09	SCREW +BVTT 2.6X5 (S) (AEP)	

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.